

SPOKANE COUNTY FIRE DISTRICT 8

Standard Operating Procedures

10.11.04 PERSONAL PROTECTIVE EQUIPMENT



Adopted: 12/20/16
Reviewed: 07/03/18
Revised: 07/03/18

Approved:

A handwritten signature in black ink, appearing to read "Amy Hinton".

Purpose: To ensure the safety of members through compliance with applicable laws and standards for Personal Protective Equipment.

References: WAC 296-305, NFPA 1851, NFPA 1971, 2003 edition of ANSI Z87.1. The 2005 edition of NFPA 1977, Standard Protective Clothing and Equipment for Wildland Firefighting, United States Forest Services' Missoula Technology and Development Center (MTDC) design criteria and performance requirements for "new generation fire shelters."

Procedure:

1. Personal Protective Equipment General Procedures.

- a) The Fire District shall provide and maintain, at no cost to the employee, the appropriate protective ensemble/protective clothing to protect from the hazards to which the member is or is likely to be exposed. Information on hazard assessments can be found in WAC 296-800-16005. The Fire District shall ensure the use of all protective equipment and clothing required by this standard. Full protective equipment designated for the task shall be worn for all department activities.
- b) Firefighters shall be trained in the function, donning and doffing, care, use, inspection, maintenance and limitations of the protective equipment assigned to them or available for their use.
- c) Protective clothing and protective equipment shall be used and maintained in accordance with manufacturer's instructions. A written maintenance, repair, retirement, servicing, and inspection program shall be established for protective clothing and equipment. Specific responsibilities shall be assigned for inspection and maintenance. This requirement applies to firefighter's personally owned equipment as well as equipment issued by the employer.
- d) The Fire District shall provide for the cleaning of protective clothing and contaminated station/work uniforms at no cost to the employee. Such cleaning shall be performed by either a cleaning service, or at a fire department facility, that is equipped to handle contaminated clothing. If the fire department does its own cleaning, they shall follow the manufacturer's recommended cleaning procedure or the 2008 edition of NFPA 1851, Standard on Selection, Care and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting.
- e) Personal protective equipment and clothing shall be of a type specified by NIOSH, MSHA, NFPA, ANSI, or as specifically referenced in the appropriate section of this chapter.

SPOKANE COUNTY FIRE DISTRICT 8

Standard Operating Procedures

10.11.04 PERSONAL PROTECTIVE EQUIPMENT



Adopted: 12/20/16
Reviewed: 07/03/18
Revised: 07/03/18

Approved:

A handwritten signature in black ink, appearing to read "Tony Fisher".

- f) Members shall not wear any clothing that is determined to be unsafe due to poor thermal stability or poor flame resistance when engaged in or exposed to the hazards of structural firefighting. The Fire District shall inform members of the hazards of fabrics that melt, drip, burn, stick to the skin and cause burns to the wearer due to poor thermal stability or poor flame resistance, and shall prohibit their use by employees. Garments that are not provided by the employer, and that are made from all or mostly cotton, will meet the requirements of this section.

Garments meeting the requirements of WAC 296-305-07012 (a), meet the intent of this section.

2. Structural Firefighting.

- a) All Structural Firefighting (SFF) clothing purchased after January 1, 2014, shall meet the requirements of the 1991 edition of NFPA 1971, Standard on Protective Clothing for Structural Fire Fighting, or the 1997 edition of NFPA 1971, Standard on Protective Ensemble for Structural Fire Fighting. Firefighters shall not wear personal protective clothing manufactured prior to 1991, except for training purposes in nonhazardous areas.
- b) SFF clothing shall be maintained as specified by the manufacturer.
- c) Repairs to SFF clothing shall be done to the manufacturer's specification by qualified individuals approved by the manufacturer. Repairs must be made using materials and methods in accordance with the applicable standards under which the article was produced. Repairs include any and all alterations, modifications, additions, deletions or any other change made to the manufacturer's PPE article.
- d) SFF clothing which is damaged or doesn't comply with this section shall not be used.
- e) All SFF clothing shall be inspected semiannually by an individual qualified by the employer. Inspection intervals shall not exceed six months.

3. Face and Eye Protection.


- a) Face and eye protection shall be provided for and used by firefighters engaged in fire suppression and other operations involving hazards to the eye and face at all times when the face isn't protected by the full face piece of the SCBA. Primary face and eye protection appropriate for a given specific hazard shall be provided for, and used by, members exposed to that specific hazard. Such primary face and eye protection shall meet the requirements of the 2003 edition of ANSI Z87.1.

SPOKANE COUNTY FIRE DISTRICT 8

Standard Operating Procedures

**10.11.04
PERSONAL
PROTECTIVE EQUIPMENT**



Adopted: 12/20/16
Reviewed: 07/03/18
Revised: 07/03/18
Approved: 

- b) Persons whose vision requires the use of corrective lenses in spectacles, and who are required by this standard to wear eye protection, shall wear goggles or spectacles of one of the following types:
 - i. Spectacles with protective lenses that provide optical correction.
 - ii. Goggles that can be worn over corrective spectacles without disturbing the adjustment of the spectacles.
 - iii. Goggles that incorporate corrective lenses mounted behind the protective lens.
- c) When limitations or precautions are indicated by the manufacturer, they shall be transmitted to the user and care taken to see such limitations and precautions are strictly observed.
- d) Care, use and maintenance for any type of eye or face protection shall follow the manufacturer's suggested recommendations.
- e) Goggles shall be inspected, cleaned and disinfected prior to being reissued to other employees.
- f) Helmet face shields shall meet the requirements of the 2000 edition of NFPA 1971, Standard on Protective Ensemble for Structural Fire Fighting.

Note:

The helmet face shield alone doesn't always provide adequate eye protection against flying particles, splash, gases and vapors. For known eye hazards, such as cutting with power saws, chopping, drilling and using extrication equipment, the face shield should be worn with additional eye protection.

- i. For firefighters that don't have a helmet face shield, flexible or cushioned fitting goggles shall be provided.
- ii. Goggles shall consist of a wholly flexible frame, forming a lens holder or a rigid frame with integral lens or lenses, having a separate, cushioned fitting surface on the full periphery of the facial contact area.
 - 1. Materials used shall be chemical-resistant, nontoxic, nonirritating and slow burning.
 - 2. There shall be a positive means of support on the face, such as an adjustable headband of suitable material or other appropriate means of support to retain the frame comfortably and snugly in front of the eyes.

4. Hearing Protection.

SPOKANE COUNTY FIRE DISTRICT 8

Standard Operating Procedures

10.11.04
PERSONAL
PROTECTIVE EQUIPMENT



Adopted: 12/20/16
Reviewed: 07/03/18
Revised: 07/03/18

Approved:

A handwritten signature in black ink, appearing to read "Tony Fisher", is written over a horizontal line.

- a) Fire departments must address noise issues as required by chapter **296-817** WAC, Hearing loss prevention (noises).

Note:

Although noise levels may exceed the 115 dBA ceiling limit for noise exposures during structural firefighting activities, hearing protection that will survive these conditions and not interfere with other essential PPE may not always be available. Fire departments must consider daily noise exposures and exposures to noise outside direct firefighting activities when selecting hearing protection and may use less protection during direct fire suppression when adequate hearing protection isn't technically feasible.

5. Hand Protection.

- a) Firefighters' gloves shall, when worn with turnout clothing, provide protection to the wrist area. In turnout clothing where wristlet protection isn't provided firefighters' gloves shall be tight-fitting at the top.
- b) Firefighters' gloves used during structural firefighting operations including rescue of victims from fires or emergency medical operations where sharp or rough surfaces are likely to be encountered shall meet the requirements of the 2000 edition of NFPA 1971, Standard on Protective Ensemble for Structural Fire Fighting.

Notes:

Firefighters' gloves aren't designed to provide protection against all environments. For gloves needed to fulfill a specific requirement see that specific section of this chapter. It is the intent of this section to provide protection from intrusion through the glove by certain chemicals and from blood borne pathogens. Consult the glove manufacturers' recommendations.

Firefighters' hands should be sized for compliance using the sizing chart specified in the 2000 edition of NFPA 1971, Standard on Protective Ensemble for Structural Fire Fighting.

6. Body Protection.

- a) Body protection shall be coordinated with torso, hand, head, foot, respiratory, and face protection as outlined in WAC **296-305-02001** through **296-305-02019** and **296-305-04001**.

7. Foot protection.

SPOKANE COUNTY FIRE DISTRICT 8

Standard Operating Procedures

**10.11.04
PERSONAL
PROTECTIVE EQUIPMENT**



Adopted: 12/20/16
Reviewed: 07/03/18
Revised: 07/03/18

Approved:

A handwritten signature in black ink, appearing to read "Tony Fisher".

- a) Protective footwear purchased after January 1, 2014, shall comply with the 2007 or later edition of NFPA 1971, Standard on Protective Ensemble for Structural Fire Fighting.
- b) Fire departments shall establish written policies and procedures on the use, maintenance, and retirement criteria for footwear in conjunction with the manufacturer's recommendations.
- c) Firefighter footwear may be resoled, but upon resoling the footwear shall meet the requirements specified in this section.

8. Head Protection.

- a) Firefighters who engage in or are exposed to the hazards of structural firefighting shall be provided with and use helmets that meet, as a minimum, the requirements of the 1987 edition of NFPA 1972, Standard on Helmets for Structural Fire Fighting.
 - i. Helmets purchased after January 1, 2014, shall comply with the 2007 or later edition of NFPA 1971, Standard on Protective Ensemble for Structural Fire Fighting.
 - ii. Helmet accessories shall not interfere with the function of the helmet or its parts, and shall not degrade the helmet's performance.
 - iii. Firefighters shall follow the manufacturer's recommendations regarding inspection, cleaning, painting, marking, and storage of helmets.

9. Harnesses shall be inspected for worn or broken stitching, rivets worn out of holes, and damage from abrasion, cuts, or chemicals.

10. Wildland Firefighting.

The 2005 edition of NFPA 1977, Standard Protective Clothing and Equipment for Wildland Firefighting, shall serve as a guideline for determining performance characteristics of this clothing.

- a) Protective apparel and equipment for wildland firefighters shall be designed to provide thermal protection for the firefighters against external heat sources with flame resistant clothing and equipment without creating high heat stress loads due to the prolonged work periods they experience. Members performing suppression on a wildland fire shall wear a provided protective clothing ensemble as directed by their employer. The combined protective clothing ensemble includes:
 - i. Hardhat/helmet;
 - ii. Upper and lower torso clothing;

SPOKANE COUNTY FIRE DISTRICT 8

Standard Operating Procedures

10.11.04
PERSONAL
PROTECTIVE EQUIPMENT



Adopted: 12/20/16
Reviewed: 07/03/18
Revised: 07/03/18

Approved:

A handwritten signature in black ink, appearing to read "Tony Fisher", is written over a horizontal line.

- iii. Gloves; and
- iv. Goggles.
- b) As a minimum, members shall wear provided leather lace-up boots of sturdy construction which shall extend upward a minimum of eight inches above the top of the sole to the lowest point of the top of the boot. The sole of the boot shall be slip resistant.
- c) Additional personal protective equipment to be provided and worn shall include a fire shelter as directed by the incident commander. Persons provided fire shelters shall be trained in their use and shall receive refresher training at least annually.
- d) Wildland protective clothing shall comply with this standard.
- e) Personnel operating Type 1 or Type 2 engines assigned to structural protection shall carry structural firefighting ensembles for each firefighter on their assigned apparatus.
- f) Wildland personnel protective clothing shall not be used for interior structural firefighting.
- g) Personnel wearing full structural firefighting clothing while engaged in fighting wildland fires shall not expend more than one hour before rotating to rest and rehabilitation. Agencies may rotate crews to avoid the one-hour benchmark when containing and controlling wildland fires.
- h) Fire departments shall establish written procedures for the care, use, maintenance, and retirement criteria for wildland firefighting protective equipment in conjunction with the manufacturers' recommendations.
- i) Fire departments shall establish written procedures for the use of protective clothing and protective equipment while performing wildland firefighting activities.
- j) All wildland fire shelters purchased after the effective date of this rule must meet or exceed the United States Forest Services' Missoula Technology and Development Center (MTDC) design criteria and performance requirements for "new generation fire shelters."