



# HR/HF

## FFCC – Policy/SOG Program

Operations

Safety- Personal Protective Clothing/Equipment

Policy # 09-11

Life Safety Initiative: 1

Issued: 11/31/09

**Subject:** Personal Protective Clothing/Equipment

**Purpose:** This policy establishes the minimum requirements for the use of personal protective clothing and equipment for department personnel when operating in a hazard zone or IDLH environment. This policy is written to comply with Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1910.132 and NFPA 1500, 2007 edition.

**Scope:** This policy applies to all members of the Fire Department

### Definitions

#### Hazard zone

The hazard zone is defined as any area that requires use of SCBA or in which a firefighter is at risk of becoming lost, trapped, or injured by the environment or the structure. This would include entering a structure reported to be on fire, operating in close proximity to the structure during exterior fire attack, cause and origin investigation, confined space, trench rescue, etc.

#### IDLH

An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects or would impair an individual's ability to escape from a dangerous atmosphere.

#### L1PPE: Level 1 Protective Clothing:

Department issue fire fighting boots, bunker pants, coat, hood, helmet with chinstrap fastened and equipped with goggles, firefighting gloves, and SCBA.

#### L2PPE: Level 2 Protective Clothing:

Department issue fire fighting boots, bunker pants, coat, hood, helmet with chinstrap fastened and equipped with goggles and firefighting gloves.

### Policy

It is the policy of the Fire Department to provide personnel with the appropriate protective clothing and equipment. This protective clothing and equipment shall be used whenever an individual is exposed or potentially exposed to workplace hazards. The protective clothing and equipment purchased by the department shall meet or exceed the appropriate NFPA standard(s) and department specifications in effect at the time of purchase. Each individual is responsible to utilize and maintain their protective clothing and equipment consistent with the manufacturers instructions and department policy or guidelines.

### Authorized items and modification

Protective clothing shall not be modified in any manner without written approval from the department. **Only personal protective clothing or equipment issued by the fire department is authorized for use.** Personal items such as hand lights, wire cutters, small tools, etc. may be utilized provided they do not reduce the level of protection provided by issued clothing/equipment.

### Required level of PPE

Personnel shall not remove their protective clothing until such time that their company officer or the Incident Commander (IC) determines that such protection is no longer necessary. If operating conditions warrant, company officers may increase or decrease the required level of PPE but the responsibility to protect their personnel from injury remains with the officer. Use and discontinuation of use of SCBA shall be in accordance with Policy # \_\_\_\_\_.

If during multi-company operations the IC specifies a certain level of PPE, company officers shall not decrease that level without permission of the IC.

Incident Commanders will determine the level of PPE in those situations not addressed by this policy or where exceptions to the policy appear necessary.

### Eye protection

It is each individual's responsibility to identify situations that pose the potential for eye injury, and to utilize the appropriate level of protection. The primary, and only permissible forms of eye protection are either the SCBA facepiece, goggles, or helmet installed faceshield. Eye protection shall be used when there is a potential for flying debris, airborne particles, spraying/splashing of hazardous fluids or any other situation which may present the possibility of eye injury. This includes when operating hand or power/hydraulic tools, whenever working above head level, during wildland firefighting, and helicopter operations.

When engaged in EMS operations, EMS safety goggles shall be worn as part of universal precautions.

<b>Level of PPE required for specific types of incidents</b>	
Confined space incidents – TRT members	<ul style="list-style-type: none"><li>• Specific PPE shall be determined by the Safety Officer</li></ul>
Emergency Medical Services	<ul style="list-style-type: none"><li>• Universal Precautions and appropriate level of PPE as referenced in EMS system policy</li></ul>
Firefighting – structural	<ul style="list-style-type: none"><li>• Hazard zone or IDLH – L1PPE</li><li>• Driver/operators involved in water supply – L2PPE</li><li>• Extrication gloves shall not be worn</li></ul>
Firefighting – trash/dumpster/rubbish	<ul style="list-style-type: none"><li>• Hazard zone or IDLH – L1PPE</li></ul>
Firefighting – vehicle fires	<ul style="list-style-type: none"><li>• L1PPE</li></ul>
Fire investigations – non-investigators assisting	<ul style="list-style-type: none"><li>• Helmet, gloves and eye protection</li><li>• Bunker coat and pants</li><li>• Respiratory protection</li></ul>
Fire investigation – fire investigators	<ul style="list-style-type: none"><li>• Helmet, gloves, and eye protection</li><li>• Bunker coat or coveralls and long sleeve shirt</li><li>• Long pants and boots or bunker pants</li><li>• Respiratory protection</li></ul>

<p>Hazardous materials incidents – operations level personnel, non-HM team members</p> <p>Hazardous materials incidents – HM team members</p>	<ul style="list-style-type: none"> <li>• Personnel involved at known or suspected hazardous materials incidents shall at minimum wear and use L1PPE</li> <li>• The Emergency Response Guidebook (ERG) and other references shall be used to determine the effectiveness of L1PPE to protect against the specific chemical hazard</li> <li>• Personnel shall not enter areas where L1PPE does not provide at least limited protection <b><i>except</i></b> when necessary to make a rescue, or take action to save lives, entry may be made with L1PPE. <b>This shall only be done after a risk benefit analysis has determined that the potential benefits to the victims or citizens are greater than the risk posed to fire personnel.</b></li> <li>• Known product(s) - selection of PPE is based on product information and reference sources and is approved by HM Branch Officer and Safety Officer</li> <li>• Unknown product(s) – minimum of Level B PPE and approved by HM Branch Officer and Safety Officer</li> </ul>
<p>Structural or trench collapse – non TRT members assisting</p> <p>Structural or trench collapse, confined space – TRT members</p>	<ul style="list-style-type: none"> <li>• L2PPE</li> <li>• Specific PPE shall be determined by the Safety Officer</li> </ul>
<p>Training</p>	<ul style="list-style-type: none"> <li>• The instructor of a training session shall be responsible to ensure that an adequate level of PPE is worn during training</li> </ul>
<p>Vehicle extrication</p>	<ul style="list-style-type: none"> <li>• Personnel involved in vehicle extrication operations shall wear and use L2PPE</li> <li>• Fire department issued extrication gloves may be used in place of firefighting gloves</li> </ul>
<p>Vertical rescue – TRT members</p>	<ul style="list-style-type: none"> <li>• Specific PPE shall be determined by the Safety Officer</li> </ul>
<p>Water rescue – non WR team members</p> <p>Water rescue – WR team members</p>	<ul style="list-style-type: none"> <li>• Personal Flotation Device (PFD)</li> <li>• Specific PPE as identified by water rescue team leader</li> </ul>
<p>Wildland firefighting</p>	<ul style="list-style-type: none"> <li>• L2PPE</li> </ul>

### Storage of PPE

Protective clothing and equipment shall be stored in the appropriate location at each station. Protective clothing shall not be worn or stored in the living or office areas of the fire station. This includes the kitchen, dayroom, bunkroom, washrooms, or other areas.

### Cleaning, maintenance and inspection

**It is the responsibility of the company officer to ensure that their assigned personnel maintain clean turnout gear.** Frequent cleaning may be required based on exposure to fire products or blood borne contamination.

Washing of turnouts is to be done at a station equipped with a turnout gear washer. Turnout gear shall not be washed at home, at a Laundromat or dry cleaned. Turnout gear with blood borne contamination may be first sprayed/rinsed with an approved product to help in removal of any stains, and then washed in a turnout gear washer.

For other than regularly scheduled inspections, if assigned gear becomes unserviceable, the individual shall notify the Shift Commander, through their officer. Any unserviceable turnout clothing is to be cleaned and then sent to the Department Quartermaster, who will determine if the turnout gear is to be repaired or replaced. An email is to be sent to the Quartermaster advising them of the turnout clothing being sent in and the problem(s) with the clothing.

By the order of: \_\_\_\_\_  
Fire Chief

Date: 11/31/09

### **References:**

- NFPA 1500, *Fire Department Occupational Safety & Health Program*, 2007 edition
- OSHA: 29 CFR 1910.132

### **Resources (*click title to access resource*):**

NIOSH Firefighter Fatality Investigation Reports

- Career Fire Fighter Dies After Being Trapped in a Roof Collapse During Overhaul of a Vacant/Abandoned Building—Michigan
- Volunteer Fire Fighter Dies While Lost in Residential Structure Fire- Alabama
- Four Career Fire Fighters Injured While Providing Interior Exposure Protection at a Row House Fire – District of Columbia
- Two Career Fire Fighters Die While Making Initial Attack on a Restaurant Fire – Massachusetts

Firefighter Close Calls.Com—Weekly Fire Drills (*available on website*)

- Basic Skills Volume 20-231 Donning PPE
- PPE Use (Volume 8-91)
- Protective Clothing (Volume 5-49)