



FAIRFAX COUNTY FIRE AND RESCUE DEPARTMENT STANDARD OPERATING PROCEDURE

	SUBJECT: PROTECTIVE CLOTHING		S.O.P 03.01.02
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	CATEGORY: Buildings, Equipment and Supplies	SUBCATEGORY: Uniforms and Protective Clothing	
	APPROVED BY:  Ronald L. Mastin FIRE CHIEF, FIRE AND RESCUE DEPARTMENT	EFFECTIVE DATE: June 8, 1988 REVISION DATE: September 1, 2008	
FORMS REQUIRED: FRD-008, Supply Request/Supply Return FRD-084, Request for Repairs NOTE: Current forms are located on the department's Intranet			

PURPOSE:

To ensure that members utilize proper protective clothing, which includes Structural Firefighting or Special Operations Personal Protective Equipment (PPE).

I. INITIAL RESPONSE

- A. Upon receipt of a dispatch, personnel shall don the appropriate PPE in anticipation of a “worst-case scenario.” The level of protection can only be reduced after an on-scene assessment of the situation.
- B. There will be times when units are dispatched to a call while they are available on the radio. If personnel are not wearing the proper protective clothing for the “worst-case scenario” the driver must pull the vehicle to a safe location, allow personnel to don protective clothing, and then shall respond to the incident.

II. STRUCTURAL FIREFIGHTING PPE

- A. Structural Firefighting PPE shall be worn by all personnel when they are engaged in fire suppression activities or when they encounter an Immediate Danger to Life and Health (IDLH) environment or a potential IDLH condition.
- B. Self-contained breathing apparatus (SCBA) shall be donned and personnel shall be “on air” when entering any IDLH or potentially IDLH environment. The removal of SCBA will occur only after atmospheric monitoring indicates conditions are safe. Safe conditions include less than 10 ppm (parts per million) of carbon monoxide and the absence of visible smoke.
- C. When operating during hot weather conditions or non-IDLH conditions, the incident commander has the option of reducing the level of PPE by allowing personnel to remove select items of their Structural Firefighting PPE or switch to Special Operations PPE.
- D. Personnel shall not be required to wear Structural Firefighting PPE en route to or at the scene of a medical emergency or public service call where a hazardous condition or

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exposure is not expected. All personnel shall have the complete Structural Firefighting PPE with them on the apparatus.

- E. Personnel responding to a suppression-related incident in an EMS unit may delay donning the Structural Firefighting PPE ensemble until after they arrive at the scene.

III. SPECIAL OPERATIONS PPE

- A. Special Operations PPE is prohibited in situations where Structural Firefighting (PPE) or chemical/biological PPE affords a higher level of protection. When the level of protection for an incident is Structural Firefighting PPE, no component of the Special Operations PPE may be substituted.
- B. The Special Operations PPE is intended to be worn as incident work clothing and may be worn on extrication incidents, EMS incidents, brush fires, and other non-IDLH incidents. Special Operations PPE may be used on Technical Rescue IDLH incidents that do not have thermal implications or flash potential.
- C. The Haix boots that are issued as part of the Special Operations PPE shall not be worn as a replacement for the station work shoe. The Haix boots shall only be worn with the Special Operations pants.

IV. FIELD INSPECTION PROGRAM

- A. Each individual shall be responsible for ensuring their PPE meets department standards and shall report any discrepancies to their shift leader.
- B. Shift leaders shall perform monthly inspections and record them in the logbook. Volunteer chiefs are responsible for ensuring volunteer PPE is inspected on a regular basis. The following items shall be inspected:
 1. Structural turnout coats
 2. Structural turnout trousers
 3. Firefighting gloves
 4. Helmet (including inner liner and goggles)
 5. Firefighting boots
 6. Protective hood
 7. Suspenders
 8. Hearing protection
 9. Personal Infection Control (PIC) kits (inventory listed in the Exposure Control Plan)
 10. Scott face mask, regulator, and mask bag
 11. Structural PPE bag
 12. All components of Special Operations PPE (if issued) and PPE bag
 13. All components of EMS-only PPE

All PPE shall be inspected for barcodes with the exception of items 7 and 8.

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- C. PPE that is damaged, fits improperly, or is not barcoded shall be replaced immediately. If the shift leader finds that an employee's PPE is in such a condition as to pose an unacceptable hazard to the employee or does not fit properly, the shift leader shall direct the employee to the Personal Protection Equipment Center (PPEC), so the employee can be fitted and the PPE can be inspected and replaced, if needed.

V. STANDARDS FOR PROTECTIVE CLOTHING

- A. Only PPE *issued* by the Resource Management Section of the Fairfax County Fire and Rescue Department is allowed to be worn. All PPE that is issued by Resource Management is bar-coded.
- B. No alterations of any type will be allowed. Altering PPE may negate the National Fire Protection Association (NFPA) third-party certification and is a violation of this Standard Operating Procedure (SOP).
- C. Personnel who are injured while wearing PPE not issued by the Resource Management Section may have their worker's compensation injury claim denied. This denial does not have to be a direct result of the non-issued PPE.
- D. Coat and Trousers
 - 1. The protective coat and trousers shall be kept free of hydrocarbons, dirt, and other substances.
 - 2. All reflective trim shall be fastened with aramid thread, allowing for clear visibility of all exterior surfaces.
 - 3. All components of the coat and trousers shall be in place and in good working order, including the following components:
 - a. Zippers, Snaps, and Velcro™ fasteners.
 - b. Wristlets and water-well.
 - c. Inner liners - designed to be permanently attached to the clothing.
 - d. Suspenders.
 - 4. Names shall be clearly displayed on all structural coats, unless loaner gear is being utilized.
- E. Helmets
 - 1. Helmets shall be kept clean and all reflective trim shall be in place.
 - 2. Helmets shall be affixed with the proper shield, indicating the correct rank of the wearer.

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3. The helmet shall be kept free of any unauthorized decals or other markings. The helmet shall be free of any structural damage, including cracks (not paint cracks), melting, or punctures. The inner liner shall be in place and free of damage, dirt buildup, hydrocarbons, or any other substance.
4. The Phenix Leather Helmet will be the primary helmet. The helmet's goggles should be stored in the coat or pants pocket. The Phenix Leather Helmet shall not be worn during training fires; the employee should switch to their Cairns Helmet during this training. The helmet brim should not be altered in any way.

F. Gloves

1. Firefighting gloves shall be free of damage due to cuts, punctures, heat, or acid-initiated decomposition. Firefighting gloves shall be kept clean and free of dirt, hydrocarbons, or other substances.
2. The inner liner shall be in place and attached at the fingertips.
3. Currently, Shelby and Ringers gloves are the only extrication gloves approved by the Safety and Personnel Services Division. Any other extrication gloves must be approved in writing by the Shift Safety Officer (SAFO). An individual requesting approval of extrication gloves shall contact their assigned SAFO and arrange for inspection of the gloves. Approval shall be granted in writing with copies provided for the employee's station file and the original will be filed in the field safety officer's work location.

G. Protective Hoods

1. Hoods shall be kept clean and free of hydrocarbons, dirt, or other substances.
2. Hoods shall be checked for holes, burns, or loss of elasticity.

H. Firefighting Boots

1. Leather areas shall be maintained free of contaminants. Color and leather condition shall be maintained through use of good quality shoe/boot polish. Care should be taken to avoid getting polish in the GORE-TEX® panel.
2. The sole shall not have excessive wear, so as to ensure appropriate traction.
3. Boots shall not have tears, rips, or punctures in the GORE-TEX® panels or leather areas.
4. Devices such as rings, rawhide, or strings are prohibited from being used in zippers. Use of these items could lead to malfunction of the zipper.

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VI. STATION MAINTENANCE OF PPE

- A. The wearing of any PPE in any living space within any fire and rescue station is prohibited; this includes day rooms, bunk rooms, kitchens, offices, etc.
- B. PPE shall not be folded or stored while they are wet. The action of some chemicals under these conditions increases the corrosion rate of the fabrics. PPE should be hung until they are dry, before they are stored in gear racks.

VII. STATION CLEANING OF PPE

- A. Coat, Pants and Boots
 - 1. Place on a hard surface, such as a clean cement floor, with the lining side down (coat and pants).
 - 2. Spot clean extremely soiled areas.
 - 3. Using detergent and cold water, clean coat with a soft brush or cloth.
 - 4. Rinse thoroughly, and hang to dry in a dark open area with adequate circulation.
- B. Protective Hood, Earlaps and Gloves
 - 1. Can be washed in a washing machine using laundry detergent and warm water.
 - 2. Dry on low heat in clothes dryer.

VIII. PERSONAL PROTECTIVE EQUIPMENT CENTER (PPEC)

- A. The PPEC will handle all PPE issues, including maintaining, cleaning, repairing, inspecting, sizing, surveying, altering, and issuing loaner equipment.
 - 1. Unscheduled Repairs, Evaluation, and Cleaning of PPE, and PPE Fittings (sizing)
 - a. PPE in need of repair, non-contaminated cleaning, and evaluation outside of the scheduled cycle may be sent via Service One or dropped at the PPEC. A FRD-33 shall be attached to the PPE bag and shall contain the following information:
 - (1) FRD Employee identification number (EIN), station number, and name.
 - (2) Description of services needed.
 - (3) Any personnel needing to be sized due to gear fitting improperly shall follow Section IV.C of this SOP.

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- b. Employees must come to the PPEC for all PPE sizing, alterations and issue. It is imperative that the entire ensemble interface properly. If it is not possible for an employee to get to the PPEC for PPE measurement, one hour of compensation will be provided for an employee to go on his or her off-duty time.

2. Loaner Equipment

- a. All loaner equipment shall be requested ten days in advance, unless it is an emergency. Loaner gear can be requested through the Loaner Gear Request Form at Online Services / Personal Protective Equipment.
- b. In an emergency or after-hours, the duty safety officer will make the appropriate arrangements for the employee to receive the loaner equipment.

- B. Ordering Personal Protective Equipment

1. Online Order System

- a. Work gloves, eye protection helmet decals and suspenders, may be ordered through the online ordering system.

IX. HAZARDOUS MATERIAL CONTAMINATION

- A. Handling Contaminated Gear

1. All PPE should be double bagged. The outside bag should be red to indicate proper protective equipment should be worn before handling contaminates.
2. The bag should be marked with an FRD-33.
3. The PPEC and SAFO shall be notified of the situation.