

Wildland fires, cont...

Boots - Leather Safety Boots (No turnout boots, poor ankle support)

Fire Shelters shall be carried for emergency use

Vehicle Fires:

Personnel engaged in vehicle firefighting shall meet the same requirements as outlined above for Structure Fires.

Hazardous Materials:

Protective clothing for a hazardous materials incident depends on many factors. Entry shall not be made into a hazardous environment until a qualified individual can determine the appropriate level of protection.

Vehicle Accidents:

Structure Helmet

Gloves

Turnout Coat

Full length pants, i.e. Levi's or Ben Davis (Turnout pants recommended)

Safety Work Boots

Medical Calls:

Turnout coat or Brush Jacket

Full length pants, i.e. Levi's or Ben Davis

Structure helmet

Note: The chance of a second emergency response from the scene of a medical is a possibility. Also, there is a remote chance that the medical call could present a hazardous environment. Therefore, full structure turnouts should be taken along with you when responding to a medical, in the event they might be needed. In most cases, this would involve bringing your turnout pants, since generally, the turnout coat is already being worn.

FELTON FIRE PROTECTION DISTRICT STANDARD OPERATING PROCEDURES

ARTICLE: 2

SOP: 21xx

SECTION: 2100 SAFETY

SUBJECT: Personal Protective Equipment: Inspection and Cleaning Program

Purpose: the purpose of this program is to provide all personnel with the best possible protection for emergency and non-emergency activities. NFPA 1851 suggests that personal protective equipment (PPE) inspection and cleaning be conducted by members on a frequent basis to assure the equipment's continued suitability for use. This program allows for inspection and cleaning at the station level, as well as by an outside vendor.

Scope: All Felton Fire Protection District personnel engaged in emergency operations.

Procedure:

- A. Although this program is designed to provide inspections and cleaning on a regular schedule, PPE shall be inspected by the Chief or Company Officer immediately upon exposure to heat, hazardous materials and/or blood and bodily fluids. Aside from this stipulation, PPE shall be inspected annually by an outside vendor and monthly as directed elsewhere in this SOP.
- B. A monthly PPE Inspection form shall be kept on file in the administration office for each individual. It is very important to ensure that name and sizes are recorded on the form as professional cleaning will remove post-production markings. It is important for the inspector to understand, generally and specifically, what is required of a test to check for proper fit, excessive wear, repair or replacement.
- C. When a turn out coat and/or pants is replaced, a new PPE inspection form will be issued. All information from the monthly inspections shall be transferred to the new form. Replacement of the other PPE shall not require the issuance of a new form; however, the replacement may be noted in the comments section. It will be noted on the inspection form that the replacement was accomplished.
- D. The cleaning and maintenance contractor with an outside vendor will complete an annual inspection form. That form will be kept on file with the fire district and the vendor.
- E. The establishment of a cleaning/inspection contract through an outside vendor does not negate the individual responsibility for cleaning PPE as necessary. In fact, the introduction of health hazards from blood and other body fluids, and the by-products of combustion is a real possibility that should be monitored regularly. Contamination should be promptly and properly addressed through cleaning according to the manufacturer's and district's recommendations.
- F. Questions regarding this matter should be directed to the Fire Chief.

1. Annual Inspection
Annually during the month of October, the PPE of all personnel shall be inspected and cleaned by an outside vendor. The fire chief or designee will be responsible for scheduling with the outside vendor.
2. Monthly Inspection
Captains will inspect personnel's PPE monthly. The PPE Inspection Form will be used to ensure a thorough inspection.
3. Inspection Procedures and Guidelines
The annual and monthly inspection process is identical, however, it is important that inspectors understand, generally and specifically, what is required of a test to check for proper fit, excessive wear, repair or replacement.

General guidelines – Inspectors should observe 7 basic areas:

- 1) All materials shall be free from tears and fraying.
- 2) Seams should be intact and show no signs of excessive wear.
- 3) Reflective trim should show no signs of abrasions or loss of reflectivity due to heat exposure.
- 4) All pockets, knee pads and other accessory items should be firmly attached to the garment and show no signs of excessive wear.
- 5) Sleeve and pant cuffs should show no signs of fraying.
- 6) The entire garment should be free from excessive dirt and stains. Remember, bleach or cleaners containing bleach will damage the garment. Also, exposure to sunlight will severely damage the outer shell of the turnout coat and pants. PPE should be cleaned and dried according to the manufacturer's recommendations, usually found on a tag sewn inside the garment.
- 7) Fabric color change could be caused by exposure to high heat or ultraviolet rays. When noted, the entire garment should be checked for loss of tear strength.

In addition to the 7 areas listed above, inspectors should be aware that a minimum of a 2" overlap between the coat and pants must be maintained while the wearer is performing routine tasks. This is measured by:

1. Standing, hand together, reaching overhead as far as possible.
2. Standing, hands together, reaching overhead and bending the body forward, side to side and backward as far as possible.

Specific guidelines – Inspectors should pay close attention to the following areas:

1. Check turnout coat and pants for:
 - a. Holes and/or wear of the collar
 - b. Intact throat tab stitching and Velcro
 - c. Broken or loose stitches/threads at all double seams including pockets.
 - d. Holes and/or damage to Scotchlite on both sleeves.

- e. Holes and/or leather shrinkage on any leather or suede on the garment.
 - f. Burn holes or rips on the fabric
 - g. Wear and/or holes in pockets, inside and out
 - h. Strength of Velcro fasteners. Recommend that it be compared against the sound and strength of newer pieces.
 - i. Tears, burns, looseness and reflectivity of all Scotchlite. Use a flashlight or compare to a new piece of Scotchlite.
 - j. Proper operation if all hooks and "D" closures. All hooks and closures should be properly secured, and the process reversed. Properly operated hooks and closures should not allow any uniform to show.
 - k. Excessive grime and soot. This may be an indication of improper personal maintenance, and may require appropriate action.
 - l. Missing suspender buttons and holes where buttons were previously
 - m. Missing snaps on pants pockets
 - n. Holes in pants pockets
 - o. Take-up straps on waist of pants.
2. Check inner liner of coat and pants for:
- a. Velcro to outer shell to insure connection to the outer shell
 - b. All snaps attaching to the outer shell
 - c. Wear and/or holes in hand/wrist guards
 - d. Holes and/or delaminating of moisture barrier
 - e. Holes, wear and or delaminating of quilted thermal barrier
 - f. Heavy soot, tar, paint, or melted vinyl on liner
 - g. Small holes/tears in the outer liner
 - h. Delaminating of seam seals and seam integrity
3. Check rubber or leather boots for:
- a. Cleanliness and reflectivity of trim
 - b. Char or heat damage
 - c. Discoloration, noted by material degradation.
 - d. Fabric/material damage
 - e. Delaminating of seals
 - f. Steel toes or shank damage (check placement and form)
 - g. Waterproof
 - h. Hole tread wear
 - i. Rips, tears and/or holes
4. Check gloves for:
- a. Cleanliness
 - b. Char or heat damage, check for strength
 - c. Fabric/material damage
 - d. Shrinkage
 - e. Loss of elasticity
 - f. Seam integrity or liner pullout
 - g. Proper fit

5. Check Nomex hood for:
 - a. Cleanliness
 - b. Char or heat damage, check for strength
 - c. Fabric/material damage
 - d. Shrinkage
 - e. Loss of elasticity
 - f. Seam integrity or liner pullout
 - g. Proper fit

6. Check helmet and face shield for:
 - a. Cleanliness
 - b. Char or heat damage
 - c. Fabric/material damage
 - d. Reflective trim
 - e. Bubbling, soft spots, dents, cracks, gouges or flaking of the outer shell. If found, remove liner and check the shell from the inside. If damaged area is not soft or didn't transfer through, it is to be considered superficial.
 - f. Cracked or missing suspension, frays, cuts or signs of wear
 - g. Proper fit
 - h. Torn interior fabric
 - i. Discoloration, burns or heat damage to ear flaps
 - j. Exposure to foam through inner liner shell
 - k. Stripped adjustable ratchet or sizing adjustment slots
 - l. Clarity, scratches and cracks (face shield)
 - m. Breakaway tabs that hold helmet to liner

Where significant change to the PPE is noted the Fire Chief shall be contacted for final disposition. Upon direction from the Fire Chief, the defective PPE will be turned in for repair, cleaning and/or replacement.

All PPE shall be replaced after 10 years from the manufactured date.

4. Storage:

Due to the possibility of potentially contaminated PPE, at no time shall be worn or stored in the public areas or offices of the fire station. All gear shall be stored outside these areas and removed prior to entering.

5. PPE Cleaning Program:

The following guidelines are to be followed to allow the most effective and efficient way to clean contaminated and potentially contaminated PPE to promote a healthy environment. All PPE shall only be washed in an appropriate washer/extractor washing machine.

1. Guidelines for cleaning structural PPE:

- a. Wash shells and liners separately
- b. Wash no more than two sets of gear (liners separate) per load

- c. Use warm water not to exceed 105 degrees or no more than manufacturer recommendations.
 - d. Use fire district approved detergent and spot remover only
 - e. If turnouts are heavily soiled, brush or hose off excess soil prior to placing it in the washer/extractor.
 - f. If PPE is suspected of bio-contamination use fire district approved disinfectant.
 - g. Hang PPE to dry. Do not dry PPE in a dryer
 - h. All PPE shall be washed after every fire or hazardous environment when deemed necessary by the officer in charge
 - i. All PPE shall be washed every six months as a minimum.
2. Guidelines for cleaning wild land PPE:
- a. Use warm water to exceed 105 degrees or no more than manufacturer recommendations
 - b. Use fire district approved detergent and spot remover only
 - c. Wild land PPE shall be dried per manufacturers recommendation
 - d. All PPE shall be cleaned after every fire or hazardous environment as deemed necessary by the officer in charge
 - e. All wild land PPE shall be cleaned every six months as a minimum
3. Guidelines for cleaning helmets:
- a. Helmets shall be cleaned after every fire or hazardous environment
 - b. Use mild soap and water to clean shell
 - c. Nomex shroud can be removed and washed using the wild land PPE guidelines
 - d. Clean face shield and/or goggles with Windex or warm soapy water
4. Guidelines for cleaning gloves, hoods, web gear, boots:
- a. Wash gloves and hoods in cold water with fire district approved detergent
 - b. Use mild soap and warm water with a cloth or brush to clean web gear and boots. If suspected bio-contamination, use fire district approved disinfectant
 - c.