

Personal Protective Equipment

914.1 PURPOSE AND SCOPE

The purpose of this policy is to reasonably protect Eulesse Fire Department members by providing and maintaining, at no cost to the member, personal protective equipment (PPE), safety devices and safeguards for workplace activities (37 Tex. Admin. Code § 435.1; 25 Tex. Admin. Code § 157.11(n)(27)).

914.2 POLICY

It is the policy of the Eulesse Fire Department to provide PPE and safeguards of the proper type, design, strength, and quality needed to reasonably eliminate, preclude, or mitigate a hazard.

All PPE purchased and used by the [agencyName] shall meet the applicable standard of the National Fire Protection Association (NFPA) (Tex. Gov't Code §419.043; 37 Tex. Admin Code § 435.1).

The Eulesse Fire Department shall also establish and have available for review by the Texas Commission on Fire Protection (TCFP) a written use, care, maintenance, repair, servicing, and inspection program for protective clothing and equipment to reduce the safety and health risks associated with improper selection, poor maintenance, inadequate care, excess wear, and improper use of PPE.

914.3 PPE USE

Firefighting personnel while responding to all fire alarms except as indicated below shall wear full protective clothing.

When responding from quarters, all members shall dress accordingly prior to response. Company officers may use their discretion to regulate this in terms of extenuating circumstances such as extremely long responses, out of quarter's responses, or when the company is moving at the time they are dispatched.

Full protective clothing will be worn at all times during the following activities:

- (a) While engaged in firefighting operations.
- (b) While engaged in overhaul operations.
- (c) While engaged in salvage if salvage operations are being performed during firefighting or overhaul activities.
- (d) While operating at an incident in or in close proximity to a hazardous, toxic, or explosive atmosphere.
- (e) While engaged in helicopter landing operations.
- (f) While directing traffic or when operating near moving vehicles, such as EMS incidents in the streets.

Eulesse Fire Department

Eulesse Fire Department Policy Manual

Personal Protective Equipment

- (g) While operating within a designated safety zone at an M.V.A., EMS., or any incident(s) that involves mass trauma, body fluid loss, broken glass, torn metal, etc.
- (h) While engaged in any live fire training exercise and drill or any other job related activity that should require the wearing of full protective clothing.

Exceptions:

- (a) While responding to fire alarms, drivers need not wear protective clothing.
- (b) Bunker coats may be removed to perform salvage and overhaul if the officer-in-charge deems safety and efficiency are not jeopardized.
- (c) Protective clothing may or may not be worn while enroute to or returning from, or engaged in inspections, surveys, demonstrations, or transferring to another station.
- (d) Protective clothing may be removed while returning to a station from a fire call or other emergency.
- (e) Protective clothing may be removed at the discretion of the officer-in-charge if the use of protective clothing may compromise patient care when operating in close quarters.

914.4 PPE STANDARDS AND REQUIREMENTS

The Department will provide approved PPE that is appropriate for the hazard to members who are located in a workplace where there is a risk of injury. Members shall be expected to wear the PPE any time there is a risk of exposure to a hazard. PPE shall include all of the following guidelines, requirements, and standards:

- (a) The PPE provided shall meet nationally recognized standards approved by the Fire Chief.
 - 1. To ensure that PPE continues to be suitable for assigned tasks, risk assessments conducted in accordance with NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, shall be reviewed and revised as needed, but in any case not more than two years following the date of the last risk assessment (37 Tex. Admin. Code § 435.1).
 - 2. No accessories may be added to PPE unless approved by Fire Administration and written approval from the manufacturer is obtained. If unable to make contact with the manufacturer, accessories may be approved after compliance with evaluation and testing as provided in NFPA 1851 (37 Tex. Admin. Code § 435.1).
 - 3. No member shall permit the addition or attachment of accessories to any PPE unless and until the requirements of NFPA 1851 have been satisfied.
- (b) When no authoritative standard exists for PPE or a safety device, the use of such equipment shall be subject to inspection and acceptance or rejection by the officer in charge of the PPE.
- (c) PPE shall be distinctly marked so as to facilitate easy identification of the manufacturer.

Eules Fire Department

Eules Fire Department Policy Manual

Personal Protective Equipment

- (d) The Training Chief shall ensure that the member is properly instructed and uses PPE in accordance with the manufacturer's instructions.
- (e) The Department shall ensure that all PPE complies with any applicable state standards.
- (f) Members are responsible for maintaining their assigned PPE in a safe and sanitary condition.
- (g) Supervisors are responsible for ensuring that all PPE is maintained in a safe and sanitary condition.
- (h) PPE shall be of such design, fit, and durability as to provide adequate protection against the hazards for which they are designed.
- (i) PPE shall be reasonably comfortable and shall not unduly encumber member movements that are necessary to perform work.
- (j) The Eules Fire Department shall use trained personnel, organization or a service provider to perform Advanced cleanings, sanitation or disinfection, advanced inspections, and repair services of ensembles and ensemble elements. PPE training certifications of those members of the Eules Fire Department that document the training needed to perform Advanced Cleanings and Inspections shall be kept on file. Certifications from outside agencies that may be use for the care and inspection of PPE shall be kept on file as well.

914.4.1 HEAD PROTECTION

Members working in locations where there is a risk of head injuries from flying or falling objects and/or electric shock and burns shall wear an approved protective helmet. Each protective helmet shall bear the original marking required by the ANSI and NFPA standards under which it was approved. At a minimum, the marking shall identify the manufacturer, the ANSI designated standard number and date, and the ANSI designated class of helmet. Where there is a risk of injury from hair entanglements in moving parts of machinery, combustibles or toxic contaminants, members shall confine their hair to eliminate the hazard.

914.4.2 FACE AND EYE PROTECTION

Members working in locations where there is a risk of eye injuries, such as punctures, abrasions, contusions, or burns from contact with flying particles, hazardous substances, projectiles, or injurious light rays that are inherent in the work or environment, shall be safeguarded by means of face or eye protection. Suitable screens or shields isolating the hazardous exposure may be considered adequate safeguarding for nearby members. The Department shall provide and require that members wear approved face and eye protection suitable for the hazard (Tex. Gov't Code § 419.040; 37 Tex. Admin. Code § 435.1).

914.4.3 BODY PROTECTION

Body protection may be required for members whose work exposes parts of their bodies that are not otherwise protected from hazardous or flying substances or objects. Clothing appropriate for the work being done shall be worn. Loose sleeves, tails, ties, lapels, cuffs, or other loose clothing

Personal Protective Equipment

that can be entangled in moving machinery shall not be worn. Clothing saturated with flammable liquids, corrosive substances, irritants, or oxidizing agents shall either be destroyed or removed and not worn until properly cleaned (37 Tex. Admin. Code § 435.1).

914.4.4 HAND PROTECTION

Hand protection shall be required for members whose work involves unusual and excessive exposure of hands to cuts, burns, harmful physical or chemical agents, or radioactive materials that are encountered and capable of causing injury or impairment.

Hand protection (e.g., gloves) shall not be worn where there is a danger of the hand protection becoming entangled in moving machinery or materials. Use of hand protection around smooth-surfaced rotating equipment does not constitute an entanglement hazard if it is unlikely that the hand protection will be drawn into the danger zone.

Wristwatches, rings, and other jewelry should not be worn while working with or around machinery with moving parts in which such objects may be caught or around electrical equipment (37 Tex. Admin. Code § 435.1).

914.4.5 FOOT PROTECTION

Appropriate foot protection shall be required for members who are exposed to foot injuries from electrical hazards; hot, corrosive, or poisonous substances; falling objects; or crushing or penetrating actions, or who are required to work in abnormally wet locations. Footwear that is defective or inappropriate to the extent that its ordinary use creates the possibility of foot injuries shall not be worn. Footwear shall be appropriate for the hazard and shall comply with NFPA standards (Tex. Gov't Code § 419.040; 37 Tex. Admin. Code § 435.1).

914.5 SELECTION, CARE, AND MAINTENANCE OF PPE

PPE exists to provide the member with an envelope of protection from multiple hazards and repeated exposures. For structural firefighting, PPE is a system of components designed to work as an ensemble. Typical firefighting PPE consists of a hood, helmet, jacket, trousers, gloves, wristlets, and footwear (Tex. Gov't Code § 419.021; 37 Tex. Admin. Code § 435.1). A program for selection, care, and maintenance of PPE consists of the following.

914.5.1 SELECTION

The PPE selection process should be conducted through a labor-management committee utilizing members from labor and representatives from management.

Prior to procurement, a risk assessment shall be performed to include expected hazards, frequency of use, past experiences, geographic location, and climatic conditions. The selection process should evaluate comparative information on all ensemble elements to ensure they will interface and perform based on the risk assessment. The process should consider the following:

- (a) Review of the current risk assessment or conduct a new risk assessment not less than every two years
- (b) Changes in the present risk assessment

Personal Protective Equipment

- (c) PPE performance expectations, to include thermal and physiological effects
- (d) Style and design for user comfort and wear performance
- (e) Proper interface between the various PPE components
- (f) Specialty equipment being used with PPE shall not interfere with the intended function and interface of the PPE.
- (g) Construction for quality, durability, and garment life
- (h) Manufacturer ability to meet performance demand requirements, technical information, service, warranty, and customer support needs
- (i) Specific physical area of operation where the PPE will be used
- (j) Likelihood of or response to a chemical, biological, or radiological particulate hazard terrorism incident
- (k) The need for two sets of PPE for personnel or the number of spare PPE components to support department needs
- (l) Changes in operating procedures

PPE selected shall be in compliance with NFPA 1971.

914.5.2 INSPECTION

Prior to an inspection, all soiled or contaminated PPE should be cleaned. PPE elements contaminated by chemical, biological, radiological, or nuclear (CBRN) agents should be removed as soon as possible and bagged to be retired and disposed of per regulations.

There are two primary types of PPE inspection:

Routine inspection - Each firefighter shall conduct a routine inspection of his/her issued PPE when it is initially issued, at the beginning of each shift, and after each use, in addition to when it is suspected of having been exposed to damage or contamination. PPE should be evaluated to determine the level of cleaning.

- (a) Coat, trousers, gloves, and hood should be checked for the following:
 - 1. Soiling
 - 2. Contamination from hazardous materials or biological agents
 - 3. Physical damage, such as:
 - (a) Rips, tears, and cuts
 - (b) Damaged/missing hardware and closure systems
 - (c) Thermal damage, such as charring, burn holes, and melting
 - 4. Damaged or missing reflective trim
 - 5. Shrinkage
 - 6. Loss of elasticity or flexibility at openings
- (b) Helmets should be checked for the following:

Eules Fire Department

Eules Fire Department Policy Manual

Personal Protective Equipment

1. Soiling
 2. Contamination from hazardous materials or biological agents
 3. Physical damage to the shell, such as:
 - (a) Cracks, crazing (small cracks), dents, and abrasions
 - (b) Thermal damage to the shell, such as bubbling, soft spots, warping, or discoloration
 4. Physical damage to ear flaps, such as:
 - (a) Rips, tears, and cuts
 - (b) Thermal damage, such as charring, burn holes, and melting
 5. Damaged or missing components of suspension and retention systems
 6. Damaged or missing components of the goggle system, including:
 - (a) Discoloration
 - (b) Crazing (small cracks)
 - (c) Scratches to goggle lens, limiting visibility
 7. Damaged or missing reflective trim
- (c) Footwear should be checked for the following:
1. Soiling
 2. Contamination from hazardous materials or biological agents
 3. Physical damage, such as:
 - (a) Cuts, tears, and punctures
 - (b) Thermal damage, such as charring, burn holes, and melting
 - (c) Exposed or deformed steel toe, steel midsole, and shank
 4. Loss of water resistance
 5. Closure system component damage and functionality
 6. Loss of seam integrity and broken or missing stitches
- (d) Hood elements shall be inspected for the following:
1. Soiling
 2. Contamination
 3. Physical damage such as:
 - (a) Rips, tears, and cuts
 - (b) Thermal damage (charring, burn holes, melting, discoloration of any layer)
 4. Loss of seam integrity and broken or missing stitches
 5. Loss of face-opening adjustment

Eules Fire Department

Eules Fire Department Policy Manual

Personal Protective Equipment

- (e) Glove elements shall be inspected for the following: Glove elements shall be inspected for the following:
 - 1. Soiling
 - 2. Contamination
 - 3. Physical damage such as:
 - (a) Rips, tears, and cuts
 - (b) Thermal damage (charring, burn holes, melting, discoloration of any layer)
 - (c) Inverted liner
 - (d) Shrinkage
 - (e) Loss of flexibility
 - (f) Loss of elasticity and shape in wristlet
- (f) Drag rescue device (DRD) elements shall be inspected for the following:
 - 1. Installation in garment
 - 2. Soiling
 - 3. Contamination
 - 4. Physical damage such as
 - (a) Cuts, tears, punctures, splitting or fraying.
 - (b) Thermal damage (charring, burn holes, melting, discoloration of any layer)
 - (c) Loss of seam integrity and broken or missing stitches
- (g) Rescue belt elements shall be inspected for the following:
 - 1. Installation in garment
 - 2. Soiling
 - 3. Contamination
 - 4. Physical damage such as
 - (a) Physical damage such as Cuts, Tears, punctures, splitting or fraying.
 - (b) Thermal Damage (charring, burn holes, melting, discoloration of any layer.)
 - (c) Loss of seam integrity and broken or missing stitches.
 - (d) Damage to any of the hardware (snaps, buckles, carabiner and closures)
- (h) CMC rescue device shall be inspected for the following:
 - 1. Installation in garment
 - 2. Soiling
 - 3. Contamination

Personal Protective Equipment

4. Physical damage such as
 - (a) Physical damage such as Cuts, Tears, punctures, splitting or fraying.
 - (b) Thermal Damage (charring, burn holes, melting, discoloration of any layer.)
 - (c) Loss of seam integrity and broken or missing stitches.
 - (d) Damage to any of the hardware (Rescue Hook, Descender Device, Carabiner
- (i) Interface components shall be inspected for the following:
 1. Soiling
 2. Contamination
 3. Physical damage
 4. Loss or reduction of properties that allow component to continue as effective interface [e.g. Loss of shape or inability to remain attached to the respective element(s) where attachment is required]
 5. Loss of seam integrity and broken or missing stitches

If element(s) have known or suspected failures, Bunker Gear Officer must be notified. Bunker Gear Officer shall notify manufacturer and certification organization in writing and request written acknowledgement within 30 days. NFPA 4.6

Liners should be inspected no less than annually and when there is suspected damage.

Advanced inspection - Advanced inspection of PPE ensembles and elements shall be conducted a minimum of every 12 months or whenever routine inspections indicate a problem may exist.

Advanced inspections shall only be conducted by trained and certified members or a manufacturer-approved vendor certified to conduct advanced inspections. All findings from advanced inspections shall be documented on an inspection form. Advanced inspections shall include, at a minimum, the inspection criteria outlined in NFPA 1851.

- (a) All separable layers of the garment elements shall be individually inspected for the following:
 1. Soiling
 2. Contamination
 3. Physical damage such as:
 - (a) Rips, tears, cuts, and abrasions
 - (b) Thermal damage (charring, burn holes, melting, discoloration of any layer)
 4. Loss of moisture barrier integrity as indicated by any of the following:
 - (a) Rips, tears, cuts, and abrasions
 - (b) Discoloration

Personal Protective Equipment

- (c) Thermal damage
 - 5. Evaluation of system fit and coat/trouser overlap
 - 6. Loss of seam integrity and broken or missing stitches
 - 7. Loss of material physical integrity [e.g., ultraviolet or chemical degradation] as evidenced by discoloration, significant changes in material texture, loss of material strength, loss of liner material, and shifting of liner material
 - 8. Loss of wristlet elasticity, stretching, runs, cuts, or burn holes
 - 9. Reflective trim integrity, attachment to garment, reflectivity, or damage
 - 10. Label integrity and legibility
 - 11. Hook and loop functionality
 - 12. Liner attachment systems
 - 13. Closure system functionality
 - 14. Correct assembly and size compatibility of shell, liner, and DRD
- (b) Hood elements shall be inspected for the following:
- 1. Soiling
 - 2. Contamination
 - 3. Physical damage such as:
 - (a) Rips, tears, and cuts
 - (b) Thermal damage (charring, burn holes, melting, discoloration of any layer)
 - 4. Shrinkage
 - 5. Loss of material elasticity or stretching out of shape
 - 6. Loss of seam integrity and broken or missing stitches
 - 7. Loss of face-opening adjustment
- (c) Helmet elements shall be inspected for the following:
- 1. Soiling
 - 2. Contamination
 - 3. Physical damage to the shell such as:
 - (a) Cracks, dents, and abrasions
 - (b) Thermal damage to the shell (bubbling, soft spots, warping, discoloration)
 - 4. Physical damage to the earflaps such as:
 - (a) Rips, tears, and cuts
 - (b) Thermal damage (charring, burn holes, melting, discoloration of any layer)
 - 5. Damaged or missing components of the suspension and retention systems

Eules Fire Department

Eules Fire Department Policy Manual

Personal Protective Equipment

6. Functionality of suspension and retention systems
 7. Damaged or missing components of the faceshield/goggle system, including discoloration, or scratches to the faceshield/goggle lens limiting visibility
 8. Functionality of faceshield/goggle system
 9. Damage to the impact cap
 10. Loss of seam integrity and broken or missing stitches
- (d) Glove elements shall be inspected for the following:
1. Soiling
 2. Contamination
 3. Physical damage such as:
 - (a) Rips, tears, and cuts
 - (b) Thermal damage (charring, burn holes, melting, discoloration of any layer)
 - (c) Inverted liner
 4. Shrinkage
 5. Loss of flexibility
 6. Loss of elasticity and shape in wristlet
- (e) Footwear elements shall be inspected for the following:
1. Soiling
 2. Contamination
 3. Physical damage such as:
 - (a) Cuts, tears, and punctures, cracking, or splitting
 - (b) Thermal damage (charring, burn holes, melting, discoloration of any layer)
 - (c) Loss of seam integrity, delamination, or broken or missing stitches
 - (d) Exposed or deformed steel toe, steel midsole, or shank
 4. Loss of water resistance
 5. Closure system component damage and functionality
 6. Excessive tread wear
 7. Condition of lining such as:
 - (a) Tears
 - (b) Excessive wear
 - (c) Separation from outer layer
 8. Heel counter failure
- (f) Rescue belt elements shall be inspected for the following:

Eules Fire Department

Eules Fire Department Policy Manual

Personal Protective Equipment

1. Installation in garment
 2. Soiling
 3. Contamination
 4. Physical damage such as
 - (a) Physical damage such as Cuts, Tears, punctures, splitting or fraying.
 - (b) Thermal Damage (charring, burn holes, melting, discoloration of any layer.)
 - (c) Loss of seam integrity and broken or missing stitches.
 - (d) Damage to any of the hardware (snaps, buckles, carabiner and closures)
- (g) CMC rescue device shall be inspected for the following:
1. Installation in garment
 2. Soiling
 3. Contamination
 4. Physical damage such as
 - (a) Physical damage such as Cuts, Tears, punctures, splitting or fraying.
 - (b) Thermal Damage (charring, burn holes, melting, discoloration of any layer.)
 - (c) Loss of seam integrity and broken or missing stitches.
 - (d) Damage to any of the hardware (rescue hook, descender device, carabiner)
- (h) Interface components shall be inspected for the following:
1. Soiling
 2. Contamination
 3. Physical damage
 4. Loss or reduction of properties that allow component to continue as effective interface such as loss of shape or inability to remain attached to the respective element(s) where attachment is required
 5. Loss of seam integrity and broken or missing stitches
- (i) Drag rescue device (DRD) elements shall be inspected for the following:
1. Installation in garment
 2. Soiling
 3. Contamination
 4. Physical damage such as:
 - (a) Cuts, Tears, punctures, splitting or fraying.

Personal Protective Equipment

- (b) Thermal Damage (charring, burn holes, melting, discoloration of any layer.)
 - (c) Loss of seam integrity and broken or missing stitches
- (j) Liner Inspection
 - 1. Rips, tears, and abrasions
 - 2. Thermal Damage (charring, burn holes, melting, or discoloration of any layer).
 - 3. Loss of seam integrity, broken or missing stitches, and loose or missing moisture barrier seam tape.
 - 4. Material physical integrity; UV or chemical degradation as evidenced by discoloration, significant changes in material texture, loss of material strength, loss of liner material, or shifting of liner material.
 - 5. Delamination as evidenced by separation of film from substrate fabric, flaking, or powdering.
 - 6. The moisture barrier shall be tested using the hydrostatic test with no leakage results.

914.5.3 ADDITIONAL INSPECTION REQUIREMENTS

Universal precautions shall be observed, as appropriate, when handling elements during any inspection. All soiled or contaminated PPE should be cleaned in accordance with this policy prior to inspection.

Complete liner inspections in accordance with NFPA 1851 shall be conducted annually and whenever a routine inspection determines potential damage.

Department members completing advanced inspections must be certified by a certification organization accredited for PPE in accordance with NFPA 1851.

914.5.4 CLEANING AND DECONTAMINATION

The following rules and restrictions shall apply to the cleaning and decontamination of PPE:

- (a) Preliminary Exposure Reduction (PER)
 - 1. After each use, PPE and PPE elements shall undergo PER.
 - 2. Department procedures shall be followed to determine the appropriate cleaning methods.
 - 3. PPE used at a HAZMAT or CBRN incident shall undergo PER followed by an evaluation by a qualified person.
- (b) Soiled and contaminated PPE elements shall undergo either PER or advanced cleaning and shall not be taken home, washed in the home, transported in private vehicles or washed in public laundries unless the business is dedicated to handling firefighting protective clothing.

Eules Fire Department

Eules Fire Department Policy Manual

Personal Protective Equipment

- (c) Commercial dry cleaning shall not be used.
- (d) The Department will examine the manufacturer's label and user information for specific cleaning instructions.
- (e) Chlorine bleach or chlorinated solvents shall not be used to clean or decontaminate PPE elements.
- (f) Scrubbing or spraying with high-velocity water jets, such as a power washer, shall not be used.
- (g) All contract cleaning or decontamination businesses shall demonstrate procedures for cleaning and decontamination that do not compromise the performance of PPE ensembles and elements. Department standards identify and define three primary types of cleaning: routine, advanced, and specialized.
 - 1. **Routine cleaning** - After each use, any elements that are soiled shall receive routine cleaning. It is the firefighter's responsibility to routinely clean his/her PPE ensemble or elements using the following process:
 - (a) When possible, initiate cleaning at the incident scene.
 - (b) Brush off any dry debris.
 - (c) Gently rinse off debris with a water hose.
 - (d) If necessary, scrub gently with a soft bristle brush and rinse off again if necessary. Spot clean utilizing a utility sink.
 - (e) Inspect for soiling and contamination and repeat the process if necessary.
 - (f) All elements shall be air-dried in an area with good ventilation. Do not dry in direct sunlight or use a machine dryer.
 - 2. **Advanced cleaning** - Should routine cleaning fail to render the elements clean enough to be returned to service, advanced cleaning is required. In addition, elements that have been issued, used, and soiled shall undergo advanced cleaning every six months, at a minimum. Gear must be advanced cleaned at the same time it is advanced inspected.
 - (a) The department's officer in charge of PPE shall manage all advanced cleanings.
 - (b) Advanced cleaning will be coordinated with the officer in charge of PPE by either the crew or by the individual. Loaner PPE will be provided for any member scheduled to work or, if the individual has a set of back up gear assigned to them, this may be use while the first set is being cleaned.
 - (c) Station laundering machines designed for cleaning station uniforms and other standard items shall not be used to clean PPE elements.
 - (d) PPE components contaminated with blood, body fluids, and other biological contaminants shall be sanitized (cloth) or disinfected (hard surfaces such as helmet shells).
 - (e) Advanced cleanings of PPE shall take place using a washer/extractor, top loading machines are prohibited for performing Advanced cleanings.

Eules Fire Department

Eules Fire Department Policy Manual

Personal Protective Equipment

- (f) Detergents and other cleaning chemicals used in the advanced cleaning of ensemble and ensemble elements shall be appropriate for the gear being cleaned.
- (g) The following will take place for gear cleaned in the extractor
 - 1. the unit shall not be overloaded.
 - 2. heavily soiled or spotted areas shall be pretreated
 - 3. all closures shall be fastened
 - 4. water temperature shall not exceed 105 degrees
 - 5. The element shall be inspected and rewashed if needed.
- (h) Gear shall be air dried in an area with good ventilation, out of direct sunlight and fluorescent or UV light and under 105 degrees temperature.
- (i) Detachable portions of the helmet shall be removed and washed and dried separately.
- (j) The other portions of the helmet shall be done using the following procedures
 - 1. individuals shall use universal precautions including gloves, apron, sleeves or coveralls and safety glasses
 - 2. Utility sink water shall not be over 105 degrees, soap PH shall be between 6.0 and 10.5 with the proper soap to water ratio.
 - 3. use a soft bristle brush
 - 4. helmet to be thoroughly rinsed and air dried.
- (k) Gloves shall be Advanced cleaned using the following procedures
 - 1. individuals shall use universal precautions including gloves, apron, sleeves or coveralls and safety glasses
 - 2. Utility sink water shall not be over 105 degrees, soap PH shall be between 6.0 and 10.5 with the proper soap to water ratio.
 - 3. The person cleaning the gloves shall then don the gloves over the examination gloves and briskly rub the hands together, a soft bristle brush may be used.
 - 4. The person cleaning shall remove the fire fighting gloves, refill the sink with clean water, the gloves shall be thoroughly rinsed inside and outside with clean water.
 - 5. Gloves shall not be wrung out, but slightly squeezed to remove excess water.
 - 6. Gloves shall be air dried.
- (l) Footwear shall be hand washed in a utility sink using the following procedures

Eules Fire Department

Eules Fire Department Policy Manual

Personal Protective Equipment

1. individuals shall use universal precautions including gloves, apron, sleeves or coveralls and safety glasses
 2. Utility sink water shall not be over 105 degrees, soap PH shall be between 6.0 and 10.5 with the proper soap to water ratio.
 3. First the the interior of the footwear shall be scrubbed with a soft bristle brush then the exterior.
 4. The interior shall be rinsed thoroughly with water and then the exterior.
 5. Hang the boots upside down to air dry.
- (m) Hoods
1. Clean your hood as soon as possible after an incident where it has been soiled, exposed to body fluids, tars, fuels, resins, paints, acids, by-products of combustion or other hazardous materials.
 2. If the hood cannot be cleaned then it must be retired.
 3. Hoods should be washed in regular detergent in warm water not to exceed 105 degrees, rinsed in cold water.
 4. Do not use bleach.
 5. Hoods should be laundered with the liners of the PPE or with other hoods.
 6. Do not wring out a hood, squeeze the hood to remove excess water.
 7. Lie flat to dry.
3. **Specialized cleaning** - PPE elements that are contaminated with hazardous materials or biological agents shall undergo specialized cleaning as necessary to remove the specific contaminants.
- (a) The PPE elements that are contaminated or suspected to be contaminated shall be isolated, tagged, bagged, and removed from service until they undergo specialized cleaning to remove the specific contaminant. All bagged PPE shall include the member's name, company, and shift. Universal precautions shall be observed when handling known or suspected contaminated PPE elements. For more information on decontamination of PPE after exposure, refer to the Communicable Diseases Policy #903.
 - (b) The department's HSO shall manage all specialized cleaning and will utilize a qualified contract cleaner. The Department, if possible, shall identify the suspected contaminant and consult the manufacturer for an appropriate decontamination agent and process.
 - (c) Specialized cleaning of all ensemble elements and thier components shall be according to NFPA 1851, ch 7.5.

Personal Protective Equipment

4. **Decontamination** -Where the form of contamination cannot be identified, contaminated ensembles and ensemble elements shall be subject to PER, isolated, and removed from service until the suspected contaminant(s) is identified and the elements can receive Advanced or specialized cleanings as needed to remove it.

(a) General Decontamination

1. Based on the assessment of the type of contamination conditions, if cleaning or decontamination is not possible, then the affected ensemble and ensemble elements shall be condemned, retired, and disposed of as hazardous waste, if cleaning and/or decontamination is possible then they may be cleaned accordingly.
2. Where the contaminant and its source have been identified, the organization shall consult the supplier of the contaminant, the manufacturer of the ensemble and ensemble elements for an appropriate decontamination agent and process.
3. The type of bulk chemical contamination shall be assessed by the organization's hazardous materials team or other qualified experts to determine if cleaning or decontamination of the ensembles and ensemble elements is possible.
4. Ensembles and ensemble elements that are known or suspected to be contaminated with bulk chemicals shall be subject to PER, isolated, tagged, and bagged at the incident scene.
5. Where multiple forms of contamination are present, the actions for the handling and cleaning and disposition of ensemble and ensemble elements shall be according to the contamination posing the highest risk.

(b) Asbestos and Other Designated Hazardous Substance Decontamination Actions

1. Ensemble and ensemble elements that are known or suspected to be contaminated with asbestos or other designated highly hazardous substances shall be subject to PER and isolated, tagged and bagged at the incident scene.
2. The organization's hazardous materials team shall determine if cleaning or decontamination of the ensemble and ensemble elements is possible.
3. Based on the assessment of the contamination conditions, if cleaning or decontamination is not possible, then the affected ensemble and ensemble elements shall be condemned, retired, and disposed of as a hazardous waste in accordance with federal, state and local regulations.

Eules Fire Department

Eules Fire Department Policy Manual

Personal Protective Equipment

4. Based on the contamination conditions, if cleaning or decontamination is considered possible, then the affected ensemble and ensemble elements shall be subjected to specialized cleaning.
- (c) Body Fluid and other Microbial Contamination Disinfection and Sanitization Actions
1. Ensemble and ensemble elements that are known or suspected to be contaminated with body fluids or other microbial contaminants shall be subject to PER and isolated, tagged and bagged at the incident scene.
 2. The organization shall determine if disinfection or sanitization and cleaning of the ensemble and ensemble elements is possible.
 3. Based on the assessment of contamination conditions, if disinfection or sanitization and cleaning is not possible, then the affected ensemble and ensemble elements shall be condemned, retired, and disposed of as biological waste in accordance with federal, state and local regulations.
 4. Based on the assessment of the contaminant, if disinfection or sanitation is considered possible, then the affected ensemble and ensemble elements shall be subjected to disinfection or sanitization procedures, followed by either advanced cleaning or specialized cleaning procedures.
 5. The organization shall determine whether advanced cleaning or specialized cleaning shall be applied in conjunction with disinfection or sanitation. Specialized cleaning shall be permitted to be used in lieu of advanced cleaning, in conjunction with disinfection or sanitization, for those contamination circumstances where advanced cleaning is not considered sufficient to provide appropriate cleaning conditions in conjunction with the procedures used for disinfection or sanitization.
 6. Disinfection or sanitation and biological decontamination of all ensemble elements and their components shall be according to the requirements specified in NFPA 1851, ch 7.4.
- (d) Products of Combustion Cleaning
1. Ensemble and ensemble elements that have been exposed to products of combustion shall be subject to PER and isolated, tagged and bagged at the incident scene.
 2. Following PER, ensemble and ensemble elements shall be subject to advanced cleaning as soon as possible following the event.
 3. Elements shall be disassembled prior to the cleaning process and reassembled prior to returning to service.

Personal Protective Equipment

914.5.5 REPAIR OF PPE

The department's officer in charge of PPE shall manage all PPE repairs utilizing a manufacturer-recognized repair facility. All elements shall be subject to an advanced or specialized cleaning before any repair work is done. Loaner PPE is available to employees while repairs are being made. Where a condition exists that is beyond basic repair, the element shall be removed from service, tagged and sent for repair.

PPE that is damaged and has CBRN contamination shall not be repaired and shall be immediately removed from service and disposed of properly.

Original or replacement labels shall be retained on ensemble elements after repairs are completed.

All repairs and alterations shall meet NFPA 1971 specifications.

914.5.6 ISSUING PPE

All PPE ensembles or elements shall be issued through the department's officer in charge of PPE. All fittings shall be completed by the officer in charge of PPE and/or by a manufacturer's representative.

- Members shall only use department-issued PPE.
- Members shall minimize the public's exposure to soiled or contaminated PPE and avoid wearing PPE to non-fire related emergencies.
- Members shall not wear PPE inside station living quarters or other department facilities.
- Contaminated PPE shall not be transported in the apparatus crew compartment unless placed in protective case or bag.

914.5.7 STORAGE OF PPE

Properly stored PPE is not subject to advanced inspection.

The parameters for the storage of all PPE ensembles or elements include the following:

- (a) PPE shall not be stored in direct or indirect sunlight, ultraviolet radiation, or fluorescent lighting when it is not being worn.
- (b) PPE shall be clean, dry, and well ventilated before storage.
- (c) PPE shall not be stored in airtight containers unless new and unissued.
- (d) PPE shall not be stored at temperatures below 40 degrees or above 180 degrees.
- (e) PPE shall be stored in a protective case or bag to prevent damage if stored in compartments or trunks.
- (f) PPE shall not be subjected to sharp objects, tools, or other equipment that could damage the ensemble or elements.
- (g) PPE shall not be stored inside living quarters or with personal belongings, or taken or transported within the passenger compartment of personal vehicles unless it is stored in a protective case or bag.

Personal Protective Equipment

- (h) PPE shall not be stored in contact with hydraulic fluids, solvents, hydrocarbons, hydrocarbon vapors, or other contaminants.

914.5.8 PPE TRAINING

The Division Chief over Training shall be responsible for the following:

Upon issue, all members shall be provided training on this policy along with the manufacturer's written instructions on the care, use, and maintenance of their PPE, including any warnings issued by the manufacturer. New firefighters shall receive training in the care, use, and maintenance of their PPE before participating in fire training or operations. All other firefighters shall receive training as needed when PPE ensembles or elements are upgraded or changed. Manufacturer's instructions shall be followed.

914.5.9 PPE RECORD KEEPING

The Department shall maintain or require contracted vendors to maintain records on all structural firefighting ensembles or elements to include:

- (a) The name of the member to whom the element is issued.
- (b) The date and condition of the element when issued.
- (c) The manufacturer, model name, or design.
- (d) The manufacturer's identification number, lot number, or serial number.
- (e) The month and year of manufacture.
- (f) The dates and findings of all advanced inspections.
- (g) The dates of advanced cleaning, specialized cleaning, decontamination, or sanitization, and by whom it was performed.
 - 1. This should include an explanation of the reason for, and findings from, the cleaning or decontamination.
- (h) The date of any repairs, the person who repaired the PPE, and a brief description of the repair.
- (i) The date the element was removed from service (retirement).
- (j) The date and method of element disposal.
- (k) The findings of complete liner inspections.

Records of structural and proximity PPE designed to provide protection from liquid and particulate contaminants shall include a list of the specific components and interface elements required to achieve the liquid and particulate protection.

914.5.10 PPE RETIREMENT

All PPE ensembles and elements that are worn or damaged to the extent that the Department deems that it is not possible or cost effective to repair or more than 10 years old shall be retired. All PPE ensembles and elements that are no longer useful for emergency operations but are not contaminated, defective, or damaged shall not be used.

Eulesse Fire Department

Eulesse Fire Department Policy Manual

Personal Protective Equipment

Retired PPE ensembles and elements shall be either donated or used in limited training scenarios. Retired PPE may only be used for training when that training does not include live fire. Any PPE used for training shall be clearly marked : "Training only. No live fire".

No structural firefighting PPE ensembles or elements shall remain in service 10 years beyond the manufacture date.

914.5.11 SPECIAL INCIDENT PROCEDURE

If any member of the Eulesse Fire Department suffers a serious injury or death while wearing PPE, the following procedure should be followed:

- (a) The PPE will immediately be removed from service.
- (b) Custody of the PPE will be maintained by the Fire Chief or the authorized designee, and the PPE shall be kept in a secure location with controlled, documented access.
- (c) All PPE shall be non-destructively tagged and stored only in paper or cardboard containers to prevent further degradation or damage. Plastic airtight containers shall not be used.
- (d) The PPE shall be made available to the Texas State Fire Marshal, the TCFP, or the department's investigation team (see the Line-of-Duty Death and Serious Injury Investigations Policy #1036), or outside experts as approved by the Fire Chief or the authorized designee, to determine the condition of the PPE.
- (e) The Fire Chief or the authorized designee shall determine the retention period for the storage of the PPE.

914.6 REPORTING

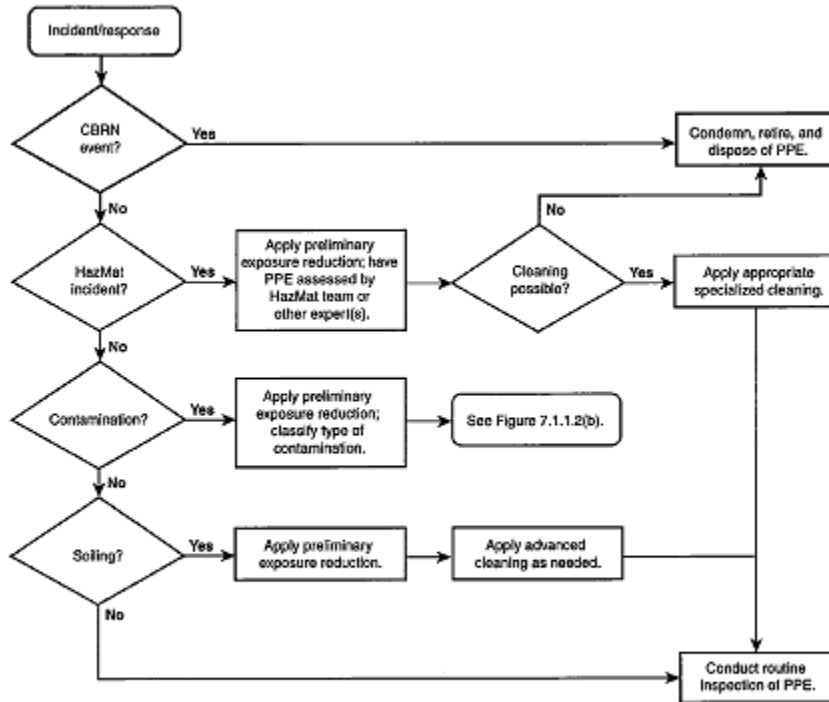
The department shall report all PPE health and safety concerns caused by, or suspected to have been caused by, element failure to the PPE element manufacturer and certifying organization in accordance with NFPA 1851.

914.7 APPROACH FOR DECIDING HANDLING, CLEANING AND DISPOSITION OF ENSEMBLE ELEMENTS

Personal Protective Equipment

1851-22

SCAM OF PROTECTIVE ENSEMBLES FOR STRUCTURAL FIRE FIGHTING AND PROXIMITY FIRE FIGHTING



Note: Contaminants shown in relative hierarchy of exposure risk. Multiple forms of contamination might apply. Clean according to highest risk.

FIGURE 7.1.1.2(a) Approach for Deciding Handling, Cleaning, and Disposition of Ensemble Elements.

Personal Protective Equipment

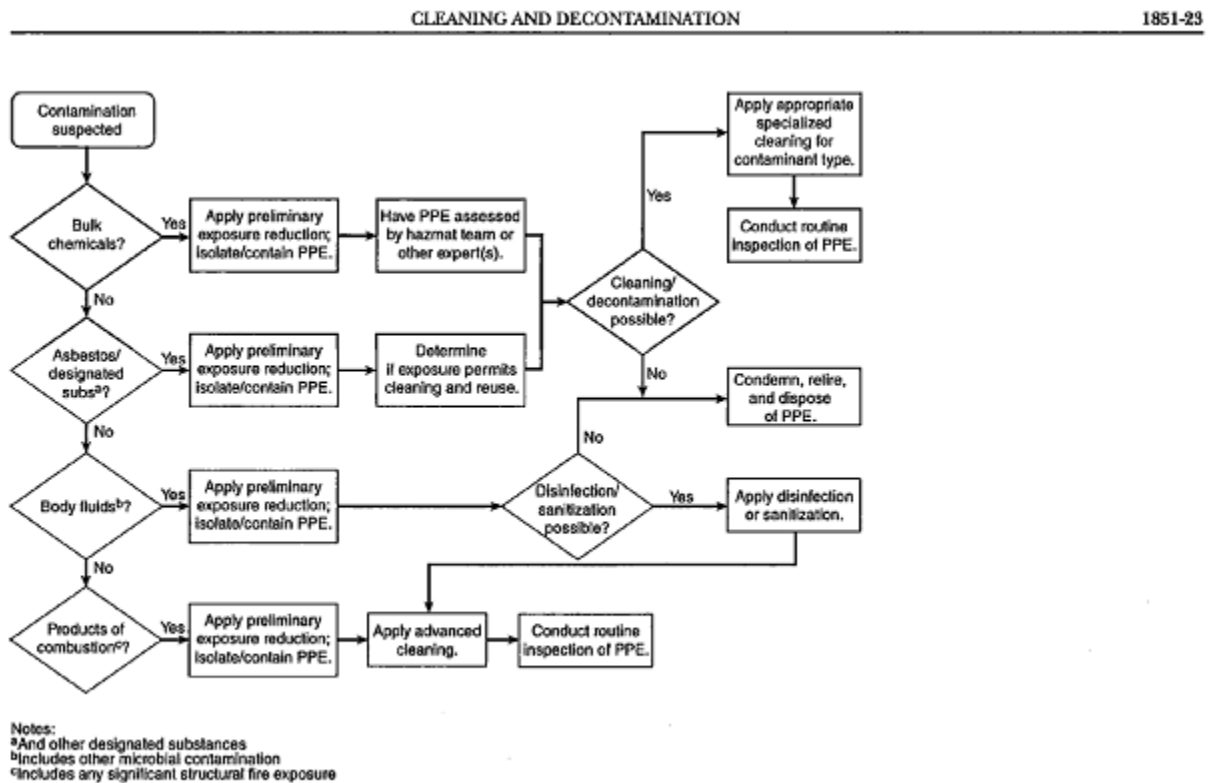


FIGURE 7.1.1.2(b) Approach for Addressing Specific Types of Contamination.