Policy

It is the policy of the Phoenix Fire Department to provide its members with protective clothing and equipment to safeguard them from injury when involved in Fire Department activities. The protective clothing and equipment shall be appropriate for the various activities and services the Fire Department members may provide.

The purpose of these Standard Operating Procedures is to establish a program for structural and proximity firefighting protective coats, pants, hoods, helmets, gloves and boots to reduce the safety and health risks associated with these items when they are poorly maintained, contaminated or damaged.

Scope

This document complies with NFPA 1851 Standard on Selection, Care and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2014 Edition.

This document describes the program parts, establishes program procedures and assigns roles and responsibilities to all uniformed members of The Phoenix Fire Department for implementing and maintaining the program.

It is the objective of the program to provide protective ensembles that are appropriate for their intended use.

It is the objective of the program to set requirements for the proper handling, care, maintenance and retirement of protective ensembles.

Program Parts

Phoenix Fire Department has designated personnel who have been trained to provide in-house inspection and services including: (Per NFPA 1851 Standards)

- Advanced Inspection
- Complete Liner Inspection
- Cleaning and Decontamination
- Basic Repairs
Protective clothing inspections will use the following inspection criteria to evaluate the condition of protective clothing. Each item will be rated in at least one of the five categories:

1. New
2. Good
3. Fair
4. Exposed
5. Condemned

Cleaning and decontamination of soiled or contaminated ensemble elements must take place before additional inspection occurs. Cleaning and decontamination are important in maintaining the integrity of the gear and in reducing exposure to carcinogens.

The following elements should be checked as part of a routine inspection:

- Soiling
- Contamination
- Physical damage such as the following:
  - Rips, tears and cuts.
  - Damaged or missing hardware and closure systems.
  - Thermal damage (charring, burn holes, melting, discoloration of any layer).
  - Damaged or missing reflective trim.
  - Loss of seam integrity and broken or missing stitches.

Protective clothing inspections will be conducted at least one time annually, during Battalion turnout cleaning. All members are to inspect their turnouts as part of their daily morning routine and report any issue they may encounter. Each member is responsible for the cleaning, care and maintenance of each set of protective clothing ensemble, and also responsible for obtaining repairs when needed by following established Resource Management procedures.

Contaminated Protective Ensembles will be collected on a daily basis from fire stations with coordination through Resource Management. Resource Management will clean, inspect and repair, if necessary, any documented needs by the member turning in their ensemble. Resource will do their best to get the clean ensemble returned to the member before the start of their next shift.

Resource Management will track and document each set of Protective Ensemble by scanning every set into their database.

Protective ensembles that need to be replaced will be exchanged at Resource Management at the earliest opportunity. An electronic Lost, Stolen or Damaged Report (LSD) will need to be
filled out by the member receiving the new ensemble. To initiate any PPE issue contact Turnout program manager for repair and or replacement at 602-495-5151.

**Helmets**

Helmets shall be maintained reasonably clean with proper company numbers in place. Face-shield, chin strap, ear flaps and suspension shall be in good condition.

**Cleaning:**

- Separate shroud (ear/neck protector) from helmet and tag for identification.
- Place shroud in soak tank for 30 minutes, then wash in extractor. Be sure to cover and protect Velcro so it doesn’t damage other PPE equipment while washing.
- Spray and scrub with a sponge or light duty cleansing pad with fire departments approved PPE cleaning solutions.
- Thoroughly rinse entire helmet 2-3 times.
- Heavily soiled helmets can be soaked for 30 minutes in soak tank. Then scrubbed with a sponge or light duty cleansing pad if needed.
- Thoroughly rinse entire helmet 2-3 times.
- Helmets shall be air dried.
- Shrouds (ear/neck protector) shall be air dried.
- Properly identify the correct helmet and shroud and reassemble.
- Use a mild detergent with a pH level from 6.0 to 10.5 (look for documentation on detergent that it has been tested for PPE).

**Replace:**

- Severely stained or split face piece.
- Helmet with visible cracks.
- Helmet which is warped or bubbled from exposure to heat.

**NOTE:** All items constructed from thermoplastics are susceptible to ultraviolet and chemical degradation. When the helmet loses its surface gloss and the surface begins to flake away, this chemical degradation has occurred. During inspections, helmets will be checked for these conditions and the shell will be replaced immediately if they are evident.
Protective Hoods

- Protective Hoods - Members should utilize the Hood Exchange Program.
- Should be cleaned with NFPA 1851 approved cleaner.
- Hoods that have holes, tears, are stretched out or that have visible burns should be replaced.

Gloves

Cleaning- Should be cleaned with NFPA 1851 approved cleaner.

Replace:

- Stiff or rigid gloves.
- Stitching worn or rotten.
- Glove insulation is worn through.
- Leather split.
- Gloves with holes or tears in them.
- Gloves that do not fit properly.
- Gloves which are not Fire Department approved.

Turnout Coat & Pants Outer shell

Cleaning:

- Separate layers of Garment Ensemble.
- Spot treat heavy soiled areas with approved spotters/cleaners.
- Close all closures on coat and pants (outer shell).
- Load machine to the capacity recommended by machine manufacturer.
- Use a mild detergent with a pH level from 6.0 to 10.5 (look for documentation on detergent that it has been tested for turnouts).
- Wash with machines that have an extract speed of less than 100g force if possible.
- If the machine has programmable cycles, then wash on the appropriate cycle for the element being washed (outer shell vs. liner).
- Remove gear from machine and inspect and rewash if needed.
Repairs:

- All repairs requiring stitching must be made with Nomex thread.
- Broken snaps.
- Rivets pulled loose from fabric and from the objects they secure.
- Suspenders, snaps, and leather eyes which are broken or elongated.
- Stitching missing.
- Holes or rips in shell of garment.
- Frayed or worn collars.
- Ripped liners.
- Reflective stripes which are burned, cracked, melted or torn.
- Wristlets that are torn or stretched.

Replace:

- Coat and pant no longer fits.
- Inspected and does not fit matrix cost for repair.
- Older than 10 years.

**Turnout Coat and Pant Liner**

- Separate layers of Garment Ensemble.
- Spot treat heavy soiled areas with approved spotters.
- Turn Liner inside out ...close all closures on coat and pants.
- Load machine to the capacity recommended by machine manufacturer.
- Use a mild detergent with a pH level from 6.0 to 10.5 (look for documentation on detergent that it has been tested for turnouts).
- Wash with machines that have an extract speed of less than 100g force if possible.
- If the machine has programmable cycles, then wash on the appropriate cycle for the element being washed (outer shell vs. liner).
- Remove gear from machine and inspect and rewash if needed.
- **Note: water temp shall not exceed 105 degrees F.**

**Boots**

- Should be cleaned with NFPA 1851 approved cleaner.
- Boots that are cracked, have holes in them, or don’t fit should be replaced.