



ABILENE FIRE DEPARTMENT

STANDARD OPERATING GUIDELINE

140 – PROTECTIVE CLOTHING MAINTENANCE

I. PURPOSE

The purpose of this SOG is to identify Abilene Fire Department (AFD) guidelines for the inspection and cleaning of personal protective clothing. The intent is to ensure the well being of AFD members by providing maximum protection and to comply with State requirements.

II. INSPECTION

A. Inspection of protective clothing shall be based on *NFPA 1851, Standard on Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles*.

B. Routine Inspection (After Use)

1. Each AFD member shall conduct a routine inspection of his/her protective clothing after each use that has exposed or is suspected of having exposed the PPE to damage or contamination.
2. The inspection shall include coats, pants, hoods, helmets, gloves, and boots.
3. Equipment shall be inspected for:
 - a. Soiling
 - b. Contamination from hazardous materials or biological agents.
 - c. Rips, tears, cuts, cracks, and bubbling. If an inspection reveals any damage requiring repair, refer to GO-03, Section VI.
 - d. Damaged or missing reflective trim.
 - e. Loss of elasticity on gloves and hoods.
 - f. Missing parts and/or hardware.

C. Advanced Inspection (Bi-Annual)

1. Personnel issued protective clothing will conduct advanced inspections at least twice a year. The schedule of the inspection and/or cleaning shall be the responsibility of the PPE Program Captain or his/her designee.
2. The PPE Program Captain or his/her designee will maintain records of PPE inspections/cleanings.

3. Universal personal protective precautions will be observed as needed (gloves).

III. CLEANING

The Texas Commission on Fire Protection and NFPA 1851, *Standard on Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles*, 2001 Edition, requires the inspection and/or cleaning of protective clothing at least once every six (6) months if used and soiled or contaminated. It is the responsibility of each firefighter to ensure that his/her protective clothing is delivered to the extractor station and cleaned in a timely manner in order to comply with these regulations.

- A. Soiled/contaminated protective clothing shall not be taken home for cleaning or decontamination.
- B. All cleaning of soiled/contaminated protective clothing shall be performed at AFD fire stations or specifically at Station 1 when use of the gear extractor and specialized cleaning agents are required.
 1. Routine Cleaning
 - a. After each use.
 - b. Brush off dry debris.
 - c. Rinse off debris with water hose.
 - d. Use a soft bristle brush and mild detergent for washing.
 - e. Inspect and repeat, if necessary.
 - f. If garment remains soiled/contaminated, send garment to Station 1 for advanced cleaning.
 2. Advanced Cleaning
 - a. Approximately every six (6) months, or sooner if needed, protective clothing that has been used and soiled or contaminated shall be sent to Station 1 for advanced cleaning.
 - b. Soiled spots shall be sprayed with gear cleaner according to manufacturer's instructions. Repeat washing if necessary.
 - c. Cleaned items will be hung up to dry.
 3. Specialized Cleaning
 - a. Any protective clothing item contaminated by hazardous materials or biological agents shall be isolated, tagged, and bagged.
 - b. The bagged items shall be removed from service.

- c. When possible, contaminated items will be decontaminated by trained AFD personnel using universal personal safety precautions.
 - d. Contaminated items that cannot be cleaned locally will be shipped to a contract cleaning service.
4. Accessory Cleaning
- a. Helmets shall be cleaned according to manufacturer's recommendations.
 - b. Boots shall be cleaned according to manufacturer's recommendations using warm soapy water and a soft bristle brush.

C. Protective Clothing Washing Process and Responsibilities

Each employee is responsible for ensuring the biannual inspection and/or cleaning of his/her protective clothing, as scheduled. Each employee is also responsible for ensuring the as-needed cleaning and/or decontamination of protective clothing (including wildland fire shirts).

1. Personal Protective Equipment (PPE) Program Captain

The PPE Program Captain or his/her designee shall ensure coordination of the washing process of protective clothing. It is the responsibility of the PPE Program Captain to:

- a. Ensure the regular cleaning of the extractor (assignment of the responsibility).
- b. Schedule an annual inspection and prevention maintenance of the extractor, if the need is identified, with an appropriate professional service company. This company should also make repairs as required by the Department.
- c. Ensure the timely order and purchase of appropriate type and quantities of liquid detergent and gear cleaner to enable the cleaning process of protective clothing; ensure maintenance of a supply of liquid detergent and gear cleaner at the extractor location.
- d. Ensure the timely order and purchase of large transparent trash bags for transporting protective clothing to and from fire stations; ensure maintenance of a supply of bags at the extractor location.
- e. Ensure the use of written washing instructions (reference document *AFD BUNKER WASHING PROCESS INSTRUCTIONS*, found in the AFD Forms Folder/Bunkers Sub-Folder) for extractor cleaning of personal protective clothing.
- f. Ensure the documentation of inspection/cleaning history for all AFD protective clothing. This information will be recorded on the form *AFD*

PROTECTIVE CLOTHING MAINTENANCE RECORD (Tabs for Staff, “A”, “B”, & “C” Shifts). To record this data, access this electronic form in the AFD Forms Folder/Bunkers Sub-Folder.

- g. Ensure that cleaning data for all AFD protective clothing shall be recorded at the extractor location by *delivery person(s)* at time of delivery, and by *washing personnel* at time of cleaning. This information will be recorded on the *BUNKER WASHING/TRACKING LOG* (access in the AFD Forms Folder/Bunkers Sub-Folder) which will be located in the washing area at Station 1. The ***delivery person*** is anyone who brings in protective clothing to the extractor location to be washed, or who takes cleaned items away from the extractor location.
 - h. Ensure the annual development and dissemination of cleaning schedules for all AFD bunkers.
 - i. Conduct budgetary planning and manage related actions necessary to effectively enable the AFD Protective Clothing Maintenance Program.
2. Firefighter Responsibilities

It is the responsibility of each firefighter that has been issued PPE to:

- a. Ensure the readiness of his/her issued protective clothing for Advanced or Specialized Cleaning (extractor washing/decontamination) as scheduled by the PPE Program Captain or as otherwise required by conditions of the protective clothing:
 - (1) Remove all attachments (including suspenders), accessories, and items from pockets of protective clothing.
 - (2) Separate shells and liners from coats and pants.
 - (3) Clearly mark all items with his/her AFD protective clothing identification number.
 - (4) Bag shells and liners, along with gloves and hoods (also wildland fire shirts, when needed).
 - (5) Generate and send an e-mail to the PPE Program Captain **and** to the Station 3 Company Officer of his/her respective shift, requesting cleaning of protective clothing. The e-mail must state name, protective clothing identification number, fire station to which the cleaned items are to be returned, and the date he/she will return to duty.
 - (6) Place a copy of the e-mail inside the bag with the protective clothing so that it is readable through the bag.
 - (7) Seal the bag.

(8) Use universal personal safety precautions when handling soiled or contaminated protective clothing.

- b. Coordinate with the Company Officer or Supervisor to whom he/she is assigned on any given duty shift to ensure that his/her protective clothing is included in the biannual inspection and/or cleaning process, as scheduled.
- c. Not schedule overtime, trade time, secondary employment, or any other activity that requires access to or use of assigned protective clothing during the cleaning schedules for his/her protective clothing.
- d. Re-inspect his/her assigned protective clothing for damage and needed repairs during this cleaning process and to immediately report such findings via e-mail to his/her respective Company Officer or supervisor, who will follow up on the matter through the chain of command.
- e. Complete reassembly of his/her cleaned protective clothing no later than 0800 hours of the next scheduled on-duty shift.
- f. Submit protective clothing for cleaning, when soiled or if contaminated, any time. Cleaning is not limited to the cleaning schedule issued by the PPE Program Captain.

3. Washing Personnel Responsibilities

- a. Clean protective clothing according to instructions in document *AFD BUNKER WASHING PROCESS INSTRUCTIONS*.
- b. Record appropriate data on form *BUNKER WASHING/TRACKING LOG*.

D. Protective Clothing Cleaning Schedule

- 1. Not later than January 15th of each calendar year, the PPE Program Captain will disseminate a cleaning schedule to AFD personnel for his/her assigned protective clothing. The schedule will provide for biannual inspection and/or cleaning (reference form *AFD PROTECTIVE CLOTHING MAINTENANCE RECORD*).
- 2. All personnel shall be personally responsible for complying with the schedule.
- 3. Vacation periods as selected by AFD employees will typically be utilized for determining the washing schedule for protective clothing.
 - a. Each firefighter will send, usually via intra-Departmental mail, his/her protective clothing to Station 1 at the conclusion of his/her last shift before the vacation period, in the manner indicated above in C.2.
 - b. Company Officers of the oncoming shift will facilitate the timely delivery of the packaged protective clothing to Station 1.

4. Specific dates for cleaning of protective clothing will be assigned in those cases where vacation leave has not been picked in a timely way to satisfy the intent and need of “biannual washing”.
 - a. This situation usually requires a *single shift turn-around* for the cleaning process of the protective clothing; i.e., the items must be delivered, cleaned, dried, and returned to the appropriate fire station between consecutive AFD shift assignments.
 - b. Any period less than three (3) consecutive shifts is to be prioritized by the washing personnel. Such abbreviated periods will be displayed in RED numbers for the scheduled washing dates on the form *AFD PROTECTIVE CLOTHING MAINTENANCE RECORD*.
5. Specific dates for cleaning of protective clothing will be assigned in those cases where vacation leave has not been picked in a timely way to satisfy the intent and need of “biannual washing”.