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January 22, 2025

TO: FIRESCOPE Board of Directors
23300 Castle Street
Riverside, CA 92518-2200

FROM: FIRESCOPE Operations Team, Task Force and Incident Safety Subcommittee

SUBJECT: BEST PRACTICES TO MEET THE STANDARDS OF NFPA 1851/ CALIFORNIA TITLE 8 STANDARD ON SELECTION, CARE, AND MAINTENANCE OF PROTECTIVE ENSEMBLES FOR STRUCTURAL FIREFIGHTING AND PROXIMITY FIREFIGHTING

SUMMARY

On January 1, 2024, the Department of Industrial Relations, Division of Occupational Safety and Health (DOSH), better known as Cal/OSHA, adopted a new section in the California Code of Regulations (CCR) Title 8, Section §3402.3. This new law established that structural and proximity firefighting protective ensembles shall be selected, inspected, and maintained in accordance with National Fire Protection Association (NFPA) 1851, 2014 edition. This section requires an organization to develop and implement a program with established standard operating procedures that define and identify the roles and responsibilities of the organization and its members. Requirements of the program include:

- Performing a risk analysis when selecting and purchasing ensembles
- Record keeping of all advanced cleaning
 - This is any time the ensembles are washed in an extractor
- Record keeping of advanced inspections
- Protecting the public and personnel from exposure to contaminated gear
- Inspection procedures
- Cleaning and decontamination
- Repair
- Storage
- Appropriate retirement of gear at the end of service life

The most recent edition of NFPA 1851 (2020) places a greater focus on reducing potential long-term health effects and safety risks associated with contaminated, improperly maintained, or damaged firefighter gear, and more clearly defines previously vague terminology. Some of the highlighted changes include the following:

- A risk assessment is now required every two years (or more often if changes are found that affect standard operating procedures). Departments are also encouraged to provide two sets of gear for each member.



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- A complete liner inspection of all garments shall be conducted as part of an annual advanced inspection (after two years in service) or whenever an issue is found during routine inspection. All layers of the garments will be inspected individually. The full liner inspection with visual inspection of the inner surface, and hydrostatic testing of the barrier, is now required to be performed annually as opposed to the third year in service.
- The most significant changes in NFPA 1851 are in relation to cleaning.
 - Personal protective equipment (PPE) worn during a structure fire is viewed as contaminated and subject to advanced or specialized cleaning.
 - The term “preliminary exposure reduction” replaces the term “routine cleaning” and addresses the need to reduce contamination on-scene.
 - Preliminary exposure reduction will be required every time PPE is exposed to products of combustion.
 - To help determine what level of cleaning is required, the 2020 revision has provided updated flow charts to aid in the decision-making process.
 - The frequency of advanced cleaning has changed from once a year to at least every six months. One of these advanced cleanings shall be completed during the advanced annual inspection.
 - Advanced cleaning must be conducted using a specific washer/extractor while top loading machines, with or without a center agitator, are no longer permitted.
- When not in use, ensembles should not be exposed to lighting that emits ultraviolet rays, including but not limited to direct or indirect sunlight, or fluorescent light.

RECOMMENDATIONS

Organizations should focus on building out a program by selecting dedicated members well versed in the standards of NFPA 1851, 2020. Once established, a comprehensive program should be developed using the parameters set forth in chapter four of the document. The program needs to be maintained by an assigned individual or group. Consideration should be given to making the program a part of the organization’s Injury and Illness Prevention program under Title 8 regulations of Cal/OSHA. Additionally, organizations should highly consider working with a certified Independent Service Provider (ISP) to meet the standards of 1851 for the following reasons.

- ISPs can play a significant role in maintaining compliance for departments with limited personnel, resources, or expertise in ensemble maintenance
- ISPs may be more budget friendly to larger departments that do not have the ability to purchase and maintain extractors in addition to the cost of specific detergents
- ISPs remove the requirement that staff members be certified in the inspection and cleaning requirements of the program
- Certified ISPs can manage inspections, cleaning requirements, and maintain records to ensure compliance



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IMPLEMENTATION PLAN

Cal OSHA has recognized NFPA 1851, 2014 edition as the minimum standard for all firefighting agencies in California. The expectation is Cal/OSHA will upgrade Title 8 §3402.3 to the NFPA 1851, 2020 revision sometime in late 2025 or early 2026. California firefighting agencies should be aware of the changes and work toward compliance with the new standard. It is highly recommended that all departments contact a verified ISP to discuss and implement these requirements.

CONCLUSION

Cal OSHA/ NFPA 1851 is intended to reduce firefighter and public exposure to contaminated structural fire PPE. Firefighting agencies in California are required to comply with this law and should be prepared for the updated requirements.