

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833
(916) 274-5721

Website address www.dir.ca.gov/oshsb



**Fire Fighters' Personal Protective Equipment -
Labor Code Section 147.4(c)
Sixth Advisory Committee Meeting
Advisory Committee Minutes**

June 3 - 4, 2025
10:00 a.m. - 4:00 p.m.
San Diego Fire-Rescue Training Facility*
2580 Kincaid Rd
Building 608, Classroom #2
San Diego, CA 92101

Chair

Maryrose Chan, Senior Safety Engineer

Analyst

Ruth Ibarra, Staff Services Manager

Occupational Safety and Health Standards Board Staff

Millicent Barajas, Executive Officer
Amalia Neidhardt, Principal Safety Engineer

Participants

Name	Organization
Caesar Alcantara	Coronado Fire Department
Maxwell (Max) Anderson	LN Curtis
Hannah Billows	CAL FIRE
Bill Black	Safety Components Fabric Technologies
Chad Christensen	Los Angeles (LA) County Fire Department
Mason Crist	Kern County Fire Department
Steve[?]	Sacramento Fire Department
Scott Estrada	Lion PPE and Shur Sales
James (Jim) Evans	Solution Safety
James (Jim) Gaboury	City of San Diego
Kevin Greene	California Professional Firefighters (CPF)

* Acknowledgement and thanks to the San Diego Fire Department for hosting the meeting

Name	Organization
Jeremiah Herterich	Bullard Safety
Keith Hodak	Bauer Compressors
Christine Hoffman	Cal/OSHA
Peter Hsiao	Los Angeles City Fire Department
Jeff Knobbe	Bauer Compressors
P.J. Kurpinsky	ShurSales representing Lion Apparel
Jeremy Lawson	CAL FIRE
Ryan Lemen	Phenix Technology
Mike Loput	LA County Fire Department
Marcus Meza	LA City Fire Department
Jesse Morris	CAL FIRE
John Morris	3M, Scott Fire & Safety
Steve Morrow	White's Boots
Jaime Randall	LN Curtis
James Rangel	Ventura County Fire Department
Jim Reidy	Texas State Association of Firefighters
Angel Sanchez	Phenix Technology
Melisa Sanchez	Phenix Technology
Robert Sestito	Sacramento Metropolitan Fire District (SMFD)
Brian Spence	Sacramento Metropolitan Fire District
Kyle Smith	City of San Diego
Rhianna Syvertsen	PPE Software
Bucky Tucker	Kern County Fire Department
Richard (Dick) Weise	Southern Area Fire Equipment Research (SAFER)

Welcome and Opening Remarks

Introduction

The Chair, Maryrose Chan, welcomed the attendees of the meeting and briefed the members of the advisory committee (AC) regarding the advisory committee process and the role of the committee.

Purpose of the Meeting

The Chair explained that the Occupational Safety and Health Standards Board (Board, OSHSB) is statutorily required by Labor Code section 147.4(c) to update the firefighter personal protective equipment (PPE) regulations in title 8 of the California Code of Regulations every five years.

The Labor Code requires the Board to examine new National Fire Protection Association (NFPA) standards; evaluate whether the updated standards provide a greater level of safety; and then update these orders in article 10.1.

The last advisory committee meeting was held in April 2024. In between the previous and current meetings, two NFPA standards have been released, NFPA 1970 and 1950.

Announcements

Walking Working Surfaces (§ 3210 Guardrails at Elevated Locations)

Maryrose Chan is also the Chair for the Walking Working Services Article 2 Advisory Committee. Federal OSHA asked OSHSB to review the exceptions for guardrails at elevated locations. The fire industry is mentioned in the one of the exceptions.

§3210. Guardrails at Elevated Locations

(b) Other Elevated Locations. The unprotected sides of elevated work locations that are not buildings or building structures where an employee is exposed to a fall of 4 feet or more shall be provided with guardrails. Where overhead clearance prohibits installation of a 42-inch guardrail, a lower rail or rails shall be installed. The railing shall be provided with a toeboard where the platform, runway, or ramp is 6 feet or more above places where employees normally work or pass and the lack of a toeboard could create a hazard from falling tools, material, or equipment.

EXCEPTIONS:

.....

12. On fire hose drying towers, the top rail may be omitted on the inboard or working side of the platform if the hose drying fingers or hangers are spaced not more than 6 inches apart and extend the full length of the platform along the open or working side to within 6 inches of the end rails. The ends of the fingers or hangers shall be positioned at the same height as prescribed for the top rail and within 5 inches from the vertical projection of the platform edge.

Cal. Code Regs., tit. 8, § 3210(b).

The hose drying tower exception may be deleted if there is no reason to amend or retain the exception. The fire service community, if compelled, should submit to the Chair information and/or suggested amendments for consideration.

Federal OSHA: Emergency Response Rulemaking

Federal OSHA is engaged in [Emergency Response Rulemaking](#) and is currently reviewing comments to develop the final rule. The Committee briefly reviewed federal OSHA rulemaking processes and how to access information like the Notice of Proposed Rulemaking, docket number, minutes and comments.

Economic & Fiscal Impact

The Chair asked committee members to provide estimated cost information due to the proposed new regulations. The Chair informed the committee members of the cost survey forms [posted online](#) on-line, but committee members can use any format that suits their needs.

Key Changes in the NFPA 1970 and 1950

NFPA 1970, Standard on Protective Ensembles for Structural and Proximity Firefighting, Work Apparel, Open-Circuit Self-Contained Breathing Apparatus (SCBA), 2025 edition

NFPA 1970 consolidates NFPA 1971 (Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting), 1975 (Emergency Services Work Apparel), 1981 (Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services) and 1982 (Personal Alert Safety Systems (PASS)) to reduce the number of standards. The Chair presented summaries of key changes regarding NFPA 1970 using a publication about the changes: Stull, Jeff, and Matt Cox. 2024. *What You Need to Know about the NFPA Consolidations*.

NFPA 1970 (2025 edition):

- Mandates particulate blocking capabilities (Chapter 7.14.1)
 - Provides basis for manufacturers to make PFAS-free claims and address restricted substances in clothing (Chapters 6.1.7.5 and 7.1.14)
 - Establishes new criteria to ensure that turnout gear maintains performance properties over the expected service life (Chapter 9.1.21.2)
 - Examines ability to effectively clean clothing materials to remove fireground contaminants (Chapters 8.2.7 and 9.9.4)
 - Adds new test methods and requirements for breathability (Chapters 8.2.2.1, 9.9.3.4 and 9.7.2)
 - Creates a new set of optional criteria to address “systems” performance of complete firefighter ensembles (Chapter 10.1.1.4)
- Stull, Jeff, and Matt Cox. 2024. *What You Need to Know about the NFPA Consolidations*.

Manufacturers will have 12 months to manufacture to the new standard, except for SCBAs, which is 18 months. (Cal/OSHA handles SCBA and respirator updates, not the Board.)

▪ **Comments Regarding the Mandate for Particulate Blocking Hoods, NFPA 1970, Chapter 7.14.1**

Chad Christensen, LA County Fire Department, said that there is concern amongst organizations about the mandate for particulate-blocking hoods and what to do going forward. He asked what the process is for California to vary from this NFPA standard.

Jim Evans, Solution Safety, responded stating that manufacturers will have to change their items to meet new NFPA standards. Fire departments will have and still use existing stock. However, when purchasing new stock, the only items available will be those that meet the new standards.

The **Chair** explained OSHSB permanent variance process.

Chad Christensen, LA County Fire Department, stated there is a request for an implementation delay for another 6 months that is being proposed to the technical committee. If the committee wants to do something different from NFPA standards, it can be used as a basis to file a Temporary Interim Amendment and hopefully get the technical committee to agree to change this standard.

The concerns are:

- Possible delays because of laboratory chemical testing backlogs (supply chain issues)
- Possibly more research and validation are needed to support the new mandate
- Lack of options and availability for fire departments to make the right decision for their organizations
- Financial impact
- Not knowing what California's PFAS requirements will be
- NFPA hood requirement changes: research and validation concerns
- The value of particulate blocking hoods given that sock hoods, depending upon the manufacturer and type of material, prevent 80% of the particulates from getting through those hoods
- Lack of verification that after washing, particulates are not trapped inside the hoods and will continue to expose employees to chemicals
- Hearing reduction, which puts firefighter in danger
- Reduction in mobility, depending on the hood type

Jim Reidy, Texas State Association of Firefighters, stated that there is no supply issue on the hoods because it is a knit. The supply chain issue is for the PPE composite. There are least three different hoods at UL already being certified to the new standard. The one-year implementation date is only for the manufacturers to have it done by that time. NFPA is going to vote in another 6 months grace.

The **Chair** stated that the grace periods will have no effect to this rulemaking, because the rulemaking process will take longer than the 6-month grace period.

Jeff Knobbe, Bauer Compressors, stated that the issues raised with particulate hoods should be directed at NFPA, not to OSHSB.

Chad Christensen, LA County Fire Department, replied that the advisory committee participation purpose is to have a voice in adopting regulations that best suit the state of California.

▪ **Other NFPA 1970, 2025 Edition, Highlights**

The **Chair** highlighted other parts of NFPA 1970:

- **PFAS-free designation.** Specifies the criteria on the labeling of gear considered as “PFAS-free.” The new NFPA standard provides the basis for the manufacturer to make that claim and how to label their equipment. The labeling criteria is based on testing for total fluorine in parts per million.
- **PPE durability.** Addresses the concern regarding durability. There are standards to ensure that turnout gear maintains performance properties expected over its life. Paragraph 9.1.21.2 of NFPA 1970 addresses durability (conditioning of garments exposed to heat, laundering, flexing).
- **Restricted substances.** There are restricted substance limits. NFPA standard has a table for restricted substances with the different chemicals and values.
- **Chemical runoff test for outer shells.** New test to evaluate how easily the fabric can repel or absorb chemicals.
- **Evaporative resistance test.** New criteria for evaporative resistance referred to as “Ret.”—resistance inherent in the fabric for evaporative cooling, the breathability of the garment. Is the garment blocking cooling from sweat evaporation? The units for this evaporative resistance test is Pa m²/W. Pascals is a unit for pressure, so it is measurement of the resistance of that fabric to let heat out of the garment. A more breathable garment will have less resistance. Thermal total heat loss (THL) measures the overall heat that is allowed to escape from the garment. The units for THL is W/m², Watts is joules/sec, so the unit describes how fast heat is escaping for that surface area of that fabric.
- **Cleaning efficiencies in chapter 9.9.3.4.** Cleaning efficiency refers to how much dirt or contamination can be removed from the garment after it has been soiled or contaminated. For example, the chart that shows removal rates. As NFPA develops these standards, different textiles are developed to meet new criteria like the resistance test. (There also is an optional test in 10.1.4.)
- **SCBA.** The purchase quality standard in 1970 includes SCBA. The key changes include an update to intrinsic safety criteria, better integration to other electronic devices, modify the End of Service Time Indicator (EOSTI) and Heads-Ups Display (HUD), and mandate to ease the removal of SCBA soft goods for cleaning. SCBA is not part of this proposed rulemaking. However, new purchases must meet NFPA 1970 as adopted, and that includes SCBA systems.

▪ Comments Regarding NFPA 1851 Editions

Jeff Knobbe, Bauer Compressors, asked why the committee is working on the five-year-old document for NFPA 1851, 2020 edition, and not the 2025 edition when NFPA 1970 is a 2025 edition.

Jim Evans, Solution Safety, responded that the NFPA 1970 document has been published, while the updates to the NFPA 1851 document is not completed yet.

Jeremy Lawson, CAL FIRE, stated that for purchasing standards, it would be NFPA 1970, 2025 edition. However, specifics within the document can be analyzed and considered for what can and will work in California. He does not think the committee has consensus on that because it still needs to be discussed. Dialogue is needed.

NFPA 1950, Standard on Personal Protective Equipment for Technical Rescue Incidents, Emergency Medical Operations, and Wildland and Urban Interface Firefighting, 2025 edition

NFPA 1950 will replace NFPA 1977, 2022 edition, in title 8 due to the consolidation. Standards relating to technical rescue and emergency medical operation are not included in the scope of Article 10.1. The committee will only review the standard with regard to wildland and wildland urban interface (WUI) firefighting. The Chair presented summaries of key points regarding NFPA 1950, referencing a publication: "The New NFPA 1950: Consolidating Tech Rescue, EMS and Wildland PPE," March 17, 2025.

Key updates regarding NFPA 1950 include:

- **Performance criteria.** The performance criteria such as Radiant Protective Performance (RPP) value of not less than 7, THL of not less than 500 W/m² remain unchanged, as well as other performance requirements (tear resistance, seam strength, shrink resistance)
- **Chapter 17.1.13.1.** Contains revamped, detailed sizing requirements for garments. For example, the standard now includes women's upper-torso garment dimensions by size. The NFPA 1977 requirements are relatively unique for protective garments in that they specify exact dimensions for standardized garments in terms of permitted measurement ranges. These requirements are applied to both shirt/pant combinations and coveralls
- **Chapter 17.1.2.1.** Contains the specification of a minimum 3-inch collar height for upper torso garments.
- **Chapter 18.1.18.** Adjustments to the new optional performance requirements for particulate-blocking garments mainly intended for WUI protection.
- **Table 17.3.5.** Gloves must now be available in five sizes
- **Shelter requirements.** Shelter requirements that were in the prior edition were removed because the testing capabilities were no longer in place. Requirements for shelters will now default to the specifications for these products as provided by the USFS.

- **Chapter 17.19.1.** Like both the technical rescue and EMS requirements, any electrical circuitry incorporated into a protective clothing item is now subject to intrinsic safety requirements.
- **Chapter 20.** Multi-functional ensembles: emergency services during technical rescue, emergency medical operations and wildland firefighting

Review of Discussion Draft

To capture below the committee’s review of the proposed regulatory language, the **bold text** denotes the agreed-upon changes from the previous meeting and will be un-bolded upon review if there are no additional comments.

The [blue text](#) is the proposed edits located in the [“Updated Discussion Draft” document](#) prepared for this sixth meeting to address outstanding “action items” from previous advisory committee meetings.

§ 3401(b)(1)&(4)

- **Outstanding Item from Prior Meeting(s)**

Edit section 3401(b)(1) and (b)(4) to make them consistent.

- **Updated Discussion Draft: §3401(b)(1)&(4)**

§3401. Application and General Requirements.

(b) General Requirements.

(1) Personal protective clothing and equipment specified in these Orders shall be provided ~~and used~~ whenever such employees are required to work in a hazardous environment that may be encountered during fire fighting activities or under similar conditions during training activities.

.....

~~(3)~~(4) Employees shall be instructed to wear or utilize appropriate personal protective clothing and equipment when directed to work in a hazardous environment until such time as the ~~officer~~ **supervisor** in charge determines that such protection is no longer required.

- **Outcome**

The committee reviewed proposed changes to make section 3401(b)(1) and (b)(4) more consistent. Proposal was accepted.

§ 3401(b)(2)(B)

▪ Outstanding Item from Prior Meeting(s)

Address “fit.” There was a concern that employers are limited by the products that are available in the market.

▪ Updated Discussion Draft: §3401(b)(2)(B)

The Chair presented two options to the committee:

§3401. Application and General Requirements.

(b) General Requirements.

(2) Employers shall develop and require use of a written plan covering the selection, safe use, maintenance, utilization, and replacement of the equipment required in these Orders. All affected employees shall be trained in accordance with such plan.

(B) Protective ensembles shall be properly sized and fitted to the user in accordance with the manufacturer’s recommendations.

or

(B) Protective ensembles shall be of such design, fit and durability as to provide adequate protection against the hazards for which they are designed. They shall be reasonably comfortable and shall not unduly encumber the employee's movements necessary to perform his or her work. [From 3380(e)]

▪ Outcome

(B) Protective ensembles shall be properly sized and fitted to the user in accordance with the manufacturer’s recommendations.

▪ Discussion

Jeremy Lawson, CAL FIRE, suggested the top version. There were no comments or disagreements.

§ 3401(b)(3)(a)

▪ Outstanding Items from Prior Meeting(s)

Review prior rulemaking and consider the following comments:

- Cal/OSHA’s suggestion to require that the protective ensembles be in a “state of readiness” instead of “in a location of readiness.”

- Los Angeles County Fire Department said that “state” needs to be defined.

- **Updated Discussion Draft: §3401(b)(3)(A)**

(b) General Requirements.

~~(2)~~(3) The employer shall ensure the availability, maintenance, and use of all protective clothing and equipment in accordance with these Orders.

(A) Protective ensembles shall be maintained in a location of readiness for immediate response to fires and like emergencies. [From section 3403(a), which should apply for the entire ensemble]

- **Outcome**

~~(2)~~(3) The employer shall ensure the availability, maintenance, and use of all protective clothing and equipment in accordance with these Orders.

(A) Protective ensembles shall be maintained and in a designated location for immediate response to fires and like emergencies.

- **Discussion**

The **Chair** reviewed the August 1977 rulemaking, and the rulemaking only mentioned “location of readiness” therefore the proposal was not amended for discussion. The prior rulemaking assumed PPE to be ready and at an easily reachable location. Proposed section 3401(b)(3)(A), which was relocated from existing section 3403(a), only addresses where the protective ensembles are placed so that they are ready to use, because there were other subsections pertaining to cleaning and inspection of PPE. The Chair asked the committee members whether to keep the language the same or define “in a location or state of readiness.”

Jim Gaboury, San Diego City, suggested: “shall be maintained and in a location of readiness”. Jim Gaboury emphasized that the ensembles are taken care of (maintained).

Jeff Knobbe, Bauer Compressors, agrees with adding “and.”

§ 3401(b)(5)(6)

- **Outstanding Items from Prior Meeting(s)**

- Review prior rulemaking to find out information regarding “other employees.”
 - CAL FIRE previously asked, who are “other employees” in the context of existing section 3401(b)(5).

- CAL FIRE took the position to remove “other employees” because the section is about firefighters. Administrative staff who are not firefighters but assigned to emergency incidents to do finance and other duties could be considered “other employees.” Since they are not fighting fires, they should not have firefighting-specific training and be assigned PPE specific to firefighting. Furthermore, incarcerated firefighters, California Conservation Corps, California Military Department, they are in firefighting classifications.

- **Updated Discussion Draft: §3401(b)(5)(6)**

(5)(6) Fire fighters and other employees engaged in emergency activities requiring special protective techniques and equipment shall be trained in the appropriate techniques and provided with the necessary protective equipment. *[Consistent with NFPA 1500, Section 7.1.7A]*

(A) Employers shall provide training on the donning and doffing of protective ensembles to minimize exposure to contaminants.

- **Outcome**

(5)(6) Fire fighters and ~~other employees~~ engaged in **firefighting activities** ~~emergency activities~~ requiring special protective techniques and equipment shall be trained in the appropriate techniques and provided with the necessary protective equipment. *[Consistent with NFPA 1500, Section 7.1.7A]*

Note: Non-fire fighting employees engaged in emergency support activities are covered under Article 10. Personal Safety Devices and Safeguards.

[Note was removed due to OAL request to remove “Note(s)” from title 8.]

- **Discussion**

Robert Sestito, Sacramento Metropolitan Fire District, agrees with CAL FIRE, but noted that not every department in California has a mechanic or an administrative staff that could be issued PPE. Deleting “other employees” out would remove requirements for any non-firefighters who are issued PPE. Labor law requires that if PPE is issued, then training is required. He asked whether the more general industry law would already supersede when a department issues PPE to somebody. Even if they are administrative staff, they would then have to be trained on the use of said PPE.

Hannah Billows, CAL FIRE, said that section 3380 under General Industry requires training for employees who are issued PPE.

The **Chair** reviewed the requirements of [section 3380](#). The Chair stated that the scope of Article 10.1 is for those engaged in firefighting activity. If your employees are engaged in firefighting activity, then you are required to provide this PPE and ensure that they are maintained and used by employees. The Chair asked whether there are

other job classifications in which NFPA approved PPE is provided to employees who do not fight fires, like mechanics and sheriff's deputies. Some affirmed.

Richard Weise, SAFER, said in his experience civilians doing work have been issued PPE and are not suppression personnel. He was on a wildland fire, and someone doing cost recovery stepped in a stump hole that was on fire down below and was severely injured. That person was not suppression personnel but was issued garments to wear in that area. He asked whether that falls in this category as well.

The **Chair** stated that Article 10 is a general standard on PPE. Article 10.1 is a vertical standard just for firefighters. Article 10.1's scope states, "These orders establish the minimum requirements for personal protective clothing and equipment for fire fighters when exposed to the hazards of fire fighting activity. Fire fighting activity is defined as physical action taken in the direct act of fire suppression, and rescue or hazardous duties performed at the location of a fire emergency."

Mechanics and other personnel that do not perform firefighting activities are outside the scope of Article 10.1's regulation. They would be covered by Article 10. The problem is these other employees who do not perform fire suppression are provided with NFPA approved PPE. The Chair proposed 2 options. Option one is to change the scope to include these other employees and include them in Article 10.1. Option two is to create a new section in Article 10. Personal Safety Devices and Safeguards to include them as people covered under this article. The Chair asked how does the fire department want to handle their PPE. It may be simpler and better to amend the scope and include them if their PPE are also going to be retired 10 years from now and if the PPE will be washed the same way.

Jeff Knobbe, Bauer Compressors, asked whether it was fair to say that an employee at a fire line but not fighting fire like a line medic or mechanic to fix a rig in a hazardous area has to be issued NFPA approved PPE to go out on that line.

Jeremy Lawson, CAL FIRE, responded it cannot be "always" or "never" because it may depend on the circumstances, who is involved and other factors. To say that a fire that is 100,000 acres does not have some area in it where some employees of any type, regardless of whether they are a firefighter or not, can be there safe in their normal attire is a true statement. Is it the first day of the fire or the 10th day of the fire? There are many types of employees, not just fire department employees, who find themselves on what is defined as emergency activities. He questioned whether a sheriff's deputy who is assigned a wildland PPE jacket when doing traffic control or evacuations would fall under this. Anyone can make an argument that they are covered under Article 10.1 because they have the PPE.

The **Chair** suggested possibly changing regulatory text to capture fire department employees who are issued NFPA approved PPE (NFPA 1971 and NFPA 1977). These are the engine operators and mechanics with ancillary duties. This way the cleaning and retirement requirement can follow Article 10.1. For workers not part of fire departments, for example, those who work for the Sheriff's office, Article 10 could be amended. The Chair confirmed with attendees within the fire department that NFPA approved PPE are given out to job classifications other than firefighters, such as heavy equipment

operators. An attendee stated that there is a long list of classification of employees who are given wildland PPE and are not classified as firefighters.

Mason Crist, Kern County, felt there was an attempt to mix general safety requirements with firefighting PPE-specific requirements. He felt removing “or others” would bring the focus back to firefighters. He pointed out that gear issued to non-firefighters would probably be on a temporary basis and not part of their normal, daily job duties. Therefore, there would be no issue about capturing that gear under inspection and maintenance requirements. He added that all logistics personnel are trained to the firefighter level, go through RT-130 wildland refresher trainings every year and meet the qualifications.

The **Chair** stated that the issue is the maintenance of the PPE. If “other employees” are issued NFPA approved PPE, how are they inspected. Will the employer have a different criterion for inspection, advance cleaning if they are not firefighters.

James Gaboury, San Diego Fire Department, explained that “other employees” could be removed because those employees, such as mechanics, civilian logistics personnel are not going to be participating or engaged in “emergency activities.” Rather, they will be supporting emergency activities.

Robert Sestito, Sacramento Metropolitan Fire District, asked whether the purchasing standards, as written, cover all the purchased garments to be maintained and repaired under the standard? If so, “other employees” could be removed without it affecting that PPE must be properly maintained.

The **Chair** explained that the standard in article 10.1 is written strictly just for firefighters unless there is a desire to expand the scope to others. Article 10 covers PPE for general industry other than firefighters.

The Chair suggested adding a Note to subsection (f) as additional explanatory materials informing the regulated public that non-firefighters are required to comply with section 3380. *[However, the word “Note” was subsequently removed because the Office of Administrative Law has restricted the use of Notes in title 8.]*

The Chair alerted the committee that “emergency activities” is not defined in title 8; therefore, a dictionary definition would apply.

There was a suggestion to change subsection 3401(b)(6) to “firefighting activities,” which is defined.

The Chair asked if there was consensus on the recommendations to strike out “other employees” and use “engage in firefighting activities” instead of “emergency activities.” Then also add a “note” that other employees engaged in emergency activities are covered under Article 10.

Jeremy Lawson, CAL FIRE, asked if there is a reason why if firefighting activities is changed, then the addition about the non-firefighting employees be changed to keep that consistent language with firefighting activities. He thinks it should be consistent. Another person agreed.

The **Chair** pointed out that the proposed change to replace “emergency activities” with “firefighting activities” would mean that these non-firefighting employees are covered under Article 10, but if they're engaged in firefighting activities, then they are firefighters.

Hannah Billows, CAL FIRE, supports specifying firefighters engaged in firefighting activity, because there is a definition for firefighting activity. If someone is engaged in firefighting, then they fall under this rule. If they are not engaged in that, then it doesn't apply.

The **Chair** wants to ensure that the regulations will be clear to the general public without additional research needed. She pointed out that notes in regulations are just information and not enforceable and they can help with clarity and people being able to interpret the regulation and determine who is and is not covered under the standard.

Jim Evans, Solution Safety, asked whether adding the note would help regulators understand how to enforce the regulation.

Chair replied yes and suggested “engage in emergency support activities” to be clearer about covering logistics people like mechanics. No one objected.

§ 3401(b)(7)

▪ **Review of New Amendment**

The **Chair** proposed 3401(b)(7) be deleted, because it is duplicative of the purchase quality standard to purchase NFPA-approved equipment.

Updated Discussion Draft: §3401(b)(7)(7) Employers shall ensure that new protective clothing and equipment provided be furnished with a statement of performance declaring that the product has been tested and meets the requirements of these Orders.

▪ **Outcome**

Delete section 3401(b)(7).

▪ **Discussion**

There were no comments.

§ 3401(b)(8)

▪ **Outstanding Items from Prior Meeting(s)**

Revise proposal to add flexibility to the type of communication channel employers can use to inform their employees of the presence of PFAS.

- **Updated Discussion Draft: §3401(b)(8)**

(8) If the employer purchases personal protective equipment ~~containing with~~ intentionally added perfluoroalkyl and polyfluoroalkyl substances (PFAS), the employer shall retain a copy of the written notice provided by the seller or manufacturer for three years from the date of the transaction. The written notice shall indicate that the personal protective equipment contains PFAS chemicals and the reason PFAS chemicals were added to the equipment.

(A) The employer shall provide a copy of the written notice to the fire fighter using the personal protective equipment upon initial issuance.

(A) The employer shall inform their employees of the written notice received from the manufacturer or seller regarding the presence of intentionally added PFAS in their personal protective equipment. The employee shall have means of obtaining a copy by electronic means or a hard copy.

- **Outcome**

(8) If the employer purchases personal protective equipment with intentionally added perfluoroalkyl and polyfluoroalkyl substances (PFAS), the employer shall retain a copy of the written notice provided by the seller or manufacturer for three years from the date of the transaction. The written notice shall indicate that the personal protective equipment contains PFAS chemicals and the reason PFAS chemicals were added to the equipment.

(A) The employer shall inform their employees of the written notice received from the manufacturer or seller regarding the presence of intentionally added PFAS in their personal protective equipment. The employer shall provide employee the means of obtaining a copy of the written notice by electronic means or a hard copy.

- **Discussion**

To address the action item, the **Chair** revised the text to replace “containing” with “intentionally added” PFAS to clarify that PFAS being part of the manufacturing process is what triggers notification requirements. The proposed new (A) in blue is to provide flexibility. However, after the release of new NFPA 1970, which has a labeling requirement for intentionally added PFAS, subsection (b)(8) may no longer be necessary.

Jeff Knobbe, Bauer Compressors, pointed out that only the buyer of the item gets notified so a mechanism to inform employees is still needed.

Ruth Ibarra, OSHSB, voiced that the responsibility should be on the employer to provide and not on the employee to retrieve it from a webpage.

The committee workshopped language, and the **Chair** proposed: “The employer shall provide employee the means of obtaining a copy of the written notice by electronic means or a hard copy.”

Jim Evans, Solution Safety, asked what types of mechanisms would be used to convey this information to an employee (in an enforceable manner).

Robert Sestito, Sacramento Metropolitan Fire Department, shared that they use TargetSolutions. They identify letters from all the manufacturers and list what products are fluorinated. Then those letters are attached. They usually start the year by requesting all new letters from manufacturers to update TargetSolutions. Then they apply that TargetSolutions to everybody. He estimated that about 75% of the district does that. Another person agreed that an easy method was to put it on TargetSolutions or some sort of training management system that requires the employee to actually open it, view it and click on it to close.

If an employee is given, for example, a pair of gloves with a fluorinated barrier, the manufacturer’s letter can be handed to the employee at the time of issuance and then documented.

The **Chair** replied, small volunteer fire departments could make copies and give them to employees.

Jeremy Lawson, CAL FIRE, asked as the end user what is the firefighter supposed to gain from their employer meeting this obligation? It doesn’t change their cleaning, wearing and garment retirement requirements. Also, firefighters in California are aware they are wearing gear that has PFAS in it, whether it came from the fire and the combustion of items burning or whether it is a garment manufactured with PFAS.

The **Chair** replied employees have the right know in California like Proposition 65. While most likely people are knowledgeable about their gear, we still need to fulfil this requirement.

Jim Evans, Solution Safety, asked if this requirement could be removed from the regulations.

The **Chair** replied no. It is a fundamental principle of existing regulations such as the hazard communication program.

Kevin Greene, California Professional Firefighters, said that the employee right to know is key and this requirement needs to remain in there.

Jeremy Lawson, CAL FIRE, stated that there is no requirement in the health and safety code for an employer to notify their employees—only for the manufacturer to notify the purchaser of PFAS-containing PPE. He voiced concern about calling out individual things in the regulation because there are a number of other things besides PFAS that may then need to be included. He felt they already have processes in place to notify employees of exactly what their PPE items are. They also already have injury and illness prevention programs that annually update employees. This could create an additional process. He asked, looking from the end user standpoint, how to ensure sharing information with firefighters consistent with already established ways rather

having to create another path to satisfy this specific requirement? He also clarified that his worry is that if individual things are specified, then at future regulation revisions more items would have to be listed.

The **Chair** noted his point and reviewed that the labor code is the overarching state law regarding the health and safety of the employees and gives the Standards Board authority to create related regulations. The regulations will clarify that if the employer has knowledge about certain potentially harmful chemicals, there is a requirement for the employer to transmit that to the employees. That disclosure is the overall principle of how health and safety is in the United States. The Chair confirmed that this standard regarding intentionally added PFAS would remain, and the means of transmitting that information is intended to be as flexible and least burdensome as possible. For example, electronic versions or hard copies could be used; no programs or applications are specified.

§ 3402.1(a)

▪ **Outstanding Items from Prior Meeting(s)**

Rewrite Exception 3 that would address CAL FIRE's concern (in red). The prior discussion draft was updated to reflect the contents of the newly release NFPA 1970 standard (blue text).

▪ **Updated Discussion Draft: §3402.1(a)**

(a) Personal protective clothing (ensemble elements), [open-circuit self-contained breathing apparatus \(SCBA\)](#), [personal alert safety system \(PASS\)](#) purchased on or after **[OAL to insert - 6 months after the effective date]**, for use in structural or proximity fire fighting shall meet certification, labeling, design, performance, and testing requirements of National Fire Protection Association (NFPA) [1974 1970](#), Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, [Work Apparel, Open-Circuit Self-Contained Breathing Apparatus \(SCBA\) for Emergency Services, and Personal Alert Safety Systems \(PASS\)](#), ~~2018~~ [2025](#) Edition, which is hereby incorporated by reference. In addition to any other applicability, the aforementioned purchase quality standards apply to discretionary equipment orders or purchases.

EXCEPTIONS:

1: [Work Apparel](#)

2. Protective ensembles or ensemble elements meeting the most current NFPA 1971 edition will be deemed as meeting the standard.

****[Prior version that was considered]*

3. [Helmets not certified to NFPA 1971 shall have the minimum performance requirements per NFPA 1971 Appendix B3, Table B.3, sections 7.4.1 through 7.4.5, 7.4.7 through 7.4.14, 7.5.6, and 7.5.9, as documented by a UL and/or](#)

SEI laboratory. Helmets that do not meet the NFPA 1971 shall consist of the following assembled components: shell, energy absorbing system, retention system, fluorescent and retroreflective trim. [From CAL FIRE]

3. If an employer purchases a previously certified (no longer) NFPA 1970, 2025 edition helmet and separately purchases NFPA 1970, 2025 certified eye, face, and ear protection, the helmet and these components taken together may meet the purchase quality standards of this section. [Committee to discuss if that should be a “may” or delete “may” and just state “meets”.]

NOTE: It is the burden of the employer to demonstrate that the shell, energy absorbing system, and retention system is of the same quality as the NFPA 1970, 2025 certified helmet.

[Question on Appendix B3, page 152 in NFPA 1971 and page 326 in NFPA 1970

7.4.4 Heat and Thermal Shrinkage Resistance (helmet: heat resistance). This test is performed on complete helmet specimens that are tested with all components in place as received

(4) The retention system, energy absorption system, or ear covers separate, melt, or drip

(9) The faceshield/goggle components drips.

Flame Resistance Test 1, Procedure B (faceshield/goggle components) This test is performed on helmet specimens with the faceshield component or goggle components, each of which is conditioned four ways prior to testing: at room temperature, at low temperature, in convective heat, and with wet conditioning.....]

~~(g)(b) Personal Alert Safety Systems purchased on or after July 1, 2023 shall meet the certification, labeling, design, performance and testing requirements of NFPA 1982, Standard on Personal Alert Safety Systems (PASS), 2018 Edition, which is hereby incorporated by reference. In addition to any other applicability, the aforementioned purchase quality standards apply to discretionary equipment orders or purchases. [Proposing to delete due to amendments to subsection (a) related to NFPA 1970]~~

~~EXCEPTION: PASS meeting the most current NFPA 1982 edition will be deemed as meeting the standard. [To be discussed at a later date by Cal/OSHA Research and Standards]~~

~~(h)(c) Open circuit self-contained breathing apparatus (SCBA) purchased on or after July 1, 2023 shall meet the certification, labeling, design, performance and testing requirements of NFPA 1981, Standard on Open-Circuit Self Contained Breathing Apparatus (SCBA) for Emergency Services, 2019 Edition, which is hereby incorporated by reference. In addition to any other applicability, the aforementioned purchase quality standards apply to discretionary equipment orders or purchases. [Proposing to delete due to amendments to subsection (a) related to NFPA 1970]~~

EXCEPTION: ~~Open-circuit SCBA meeting the most current NFPA 1981 edition will be deemed as meeting the standard. [To be discussed at a later date by Cal/OSHA Research and Standards]~~

▪ **Outcome**

(a) Personal protective clothing (ensemble elements), open-circuit self-contained breathing apparatus (SCBA), personal alert safety system (PASS) purchased on or after [OAL to insert - 6 months after the effective date], for use in structural or proximity fire fighting shall meet certification, labeling, design, performance, and testing requirements of National Fire Protection Association (NFPA) 1971-1970, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, Work Apparel, Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services, and Personal Alert Safety Systems (PASS), 2018 2025 Edition, which is hereby incorporated by reference. In addition to any other applicability, the aforementioned purchase quality standards apply to discretionary equipment orders or purchases.

EXCEPTIONS:

1: Work Apparel

2. Protective ensembles or ensemble elements meeting the most current NFPA 19740 edition will be deemed as meeting the standard.

3. Helmets that are previously certified (no longer) NFPA 1970 that shall consist of the following assembled components: shell, energy absorbing system, retention system, chin strap, fluorescent and retroreflective trim.

If an employer purchases a previously certified (no longer) NFPA 1970, 2025 edition, the helmet shall meet or exceed the minimum design and performance requirements as outlined by NFPA 1970 as documented by either:

- UL laboratory or
- SEI certification organization for safety and protective products.

If an employer purchases a previously certified (no longer) NFPA 1970, 2025 edition helmet and separately purchases NFPA 1970, 2025 certified eye, face, and ear protection, the helmet and these components taken together may meet the purchase quality standards of this section.

[This exception was edited, see the posted post-AC text]

~~(g)(b) Personal Alert Safety Systems purchased on or after July 1, 2023 shall meet the certification, labeling, design, performance and testing requirements of NFPA 1982, Standard on Personal Alert Safety Systems (PASS), 2018 Edition, which is hereby incorporated by reference. In addition to any other applicability,~~

~~the aforementioned purchase quality standards apply to discretionary equipment orders or purchases.~~

~~EXCEPTION: PASS meeting the most current NFPA 1982 edition will be deemed as meeting the standard.~~

~~(h)(c) Open circuit self-contained breathing apparatus (SCBA) purchased on or after July 1, 2023 shall meet the certification, labeling, design, performance and testing requirements of NFPA 1981, Standard on Open-Circuit Self Contained Breathing Apparatus (SCBA) for Emergency Services, 2019 Edition, which is hereby incorporated by reference. In addition to any other applicability, the aforementioned purchase quality standards apply to discretionary equipment orders or purchases. [Proposing to delete due to amendments to subsection (a) related to NFPA 1970]~~

~~EXCEPTION: Open circuit SCBA meeting the most current NFPA 1981 edition will be deemed as meeting the standard.~~

▪ Discussion

The **Chair** stated that the proposal requires purchases of PPE to be NFPA 1970 approved. There is proposed new Exception 1, work apparel, which is included in NFPA 1970. However, work apparel is not part of the scope of Article 10.1, thus the need for the exception.

Kevin Greene, California Professional Firefighters, shared that CPF has introduced Assembly Bill 1181 that directs the Standards Board to create a California-specific standard by 2027 encouraging the elimination of regrettable substances like PFAS or brominated fire retardants. CPF submitted a letter in December asking to add the bill as a topic in the advisory committee meeting. The bill passed the assembly floor last night 71 to 0 with no known opposition.

The **Chair** explained that, for selecting PPE, even though the proposed regulations require new purchases of PPE to be NFPA 1970 approved, employers still must do their own risk assessment and then choose PPE. For example, employers can choose “PFAS-free PPE” or PPE containing PFAS by considering their trade-offs (pro-con). The employer has choices on what to purchase depending on their needs. It’s part of the employer’s duty to assess what those needs are.

The **Chair** stated that Exception 2 makes it clear that you can purchase the latest PPE. It takes time to update the regulations, and it is not the intent to require employers to purchase outdated PPE. NFPA 1971 was replaced with NFPA 1970.

Jeremy Lawson, CAL FIRE, is still in the process of working with the NFPA to try to modify helmet standards and is gaining some momentum (presentations across the nation; NFPA passbooks discussions; engagement with Jeff Stull). CAL FIRE believes the NFPA standards have not kept pace with the needs of the fire service, particularly the fire service in California when it comes to helmets.

Jeremy Lawson feels that the use of goggles and purchasing goggles with structure helmets are redundant. Prior to January 1, 2023, CAL FIRE did not have to meet these requirements and could purchase Cal/OSHA compliant helmets without goggles, ear flaps. At the time, CAL FIRE did not have a culture of wearing ear flaps and goggles on helmets. The current regulations require helmets to be purchased with goggles and ear flaps. In some cases, some California departments were purchasing all those components separately, not as an assembled component, which did not meet the NFPA requirements.

CAL FIRE was able to examine data as a larger organization and do some trend analysis to understand what hazards have affected employees. CAL FIRE found, one, the injury data from prior to 2023 and after 2023 didn't really change. Number two, for the types of injuries and number of injuries on an annual basis, eye protection or ear flap use on a structural helmet was not significant (less than 10 people a year had some sort of injury where these devices are supposed to be preventing those). Therefore, CAL FIRE feels that purchasing helmets with goggles is an unnecessary burden and cost for the fire service. These regulations already require wearing SCBA the entire time at structural fires which accomplishes eye protection issues. Requiring purchase of a helmet with goggles on it insinuates those goggles must be on the helmet. When worn on a helmet, goggles are exposed to contaminants of a structure fire yet likely not even used on a structure fire. Those goggles are worn out when eye protection is needed like on vehicle accidents or for some non-Immediately Dangerous to Life or Health (IDLH) atmosphere. Now employees' sensitive skin areas are exposed to structure fire contaminants on an incident that has nothing to do with a fire. Eye protection could be accomplished using several other standards like NFPA 1500 or other Cal/OSHA regulations that require the use of eye protection.

Jeremy Lawson has not seen any data that determined there is an issue with burns or other injuries to the upper head or ear area or that ear flaps would prevent such injury. The ear flap requirements came from a time frame when there was no hood requirement. There are other ways for individual fire departments, through their own hazard risk assessment processes, to determine what is the best level of protection to ensure that employees are safe. Making ear flaps optional saves fire departments' budgets and allows departments the option to perform hazard risk assessments to ensure their employees' safety. It is a complicated issue on the NFPA side because it's not just NFPA 1971 that needs to be changed. There are three other standards that would require changes to really make this a comprehensive thing. It's a slow-moving process on that side. This topic has been at several different conferences in 2025, and a survey has been released. It has support from those engaged with NFPA processes. There is forward momentum to total changes to helmets, helmet design and other things to ensure employee safety.

Chad Christensen, LA County Fire Department, agreed with Jeremy Lawson The majority of fire departments do not use ear flaps in California. Eye protection can be complicated, convoluted and a budget extra. UL Solutions (UL) and Safety Equipment Institute (SEI) are the only two laboratories that are documented on the OSHA website as certified for PPE testing. So, for CAL FIRE's proposed language for Exception 3, if a

helmet meets the NFPA 1970 or 1971 standard as tested by those two laboratories, it can be purchased without eye protection and ear flaps.

Richard Weise, SAFER, said years ago, LA County Fire used the MSA helmet to transition to the Phenix, and that was to improve structural protection as well. They incorporated in the wildland and with hoods on them. Nowadays, shrouds are used for radiant heat. In some wildland areas, some departments cannot afford both helmets or utilize that first new helmet or the helmet that has ear flaps. He has been in heavy timber fires before and used his structure helmet. There are documents that would count fire injuries for individuals starting by wearing wildland helmets and then not wearing it. Forty years ago at his first large fire, he had cauliflower ears because of no hood and no ear flaps. He bought his own helmet for protection. There is an interface from the helmet, the ear flaps, the hood and the collar that if worn properly gives you maximum protection. If you've ever been in a flashover, you want maximum protection. So if earflaps are eliminated, should it be eliminated from the wildland as well?

The **Chair** clarified that the purchase quality standards for individual elements are not eliminated; what's being allowed is the ability for fire departments to purchase them separately and assemble what is needed for whatever incident or hazard.

Richard Weise, SAFER, The eye protection that comes with a helmet can be used for truck service on operational or educational purposes. Instead of putting it in your pouch, you just flip it down and go over. True eye protection surrounds the eye and the face and are not just sunglasses.

Jim Evans, Solution Safety, stated that the proposed rulemaking language being developed is set up so that a fire department has the ability to be able to purchase the items individually. If the helmet has gone through certification as an NFPA 1970 or 1971 helmet group, then the fire department can buy the helmet portion if they want, provided that a manufacturer will sell it that way. Jim Evans thinks that is the right thing for this community.

The **Chair** then reviewed OSHSB drafted language that attempted to address CAL FIRE and LA County Fire's concerns when an employer purchases a previously certified but no longer NFPA 1970 compliant helmet (because components are removed from the certified set).

Jeremiah Herterich, Bullard Safety, stated as a manufacturer, they must test everything. He asked for clarification about the proposed language and its note. For example, if LA County were to choose not to purchase an NFPA certified helmet, then LA County will absorb the cost of sending it to SEI to get it be certified? The language states it is the burden of the employer to demonstrate that the shell energy absorbing system and retention system are of the same quality as NFPA 1970.

As a manufacturer, Bullard creates a sticker that is compliant with NFPA 1971 and will now move over to a sticker/label that is NFPA 1970 compliant. That sticker means the helmet meets the standards for everything that is included with the helmet. He realizes that users may not want to take goggles into a fire. In addition to goggles, Bullard sells a variety of different eye protections. The same thing goes with ear to neck protection.

Each one of those items must be certified in order for us to be compliant with NFPA 1970. So a fire department says it is going to buy a shroud, hood, set of goggles or set of eye protection to attach to this helmet, then it seems the proposed language requires those entities to take the elements in the entire assembly to an SEI or UL certified testing facility to be sure that it is configured and meets those qualifications.

Chad Christensen, LA County Fire Department, thought that the OSHSB-drafted Exception 3 puts the burden back on fire departments and would disagree with the intent that a certified helmet bought without ear flaps and eye protection would not have the NFPA sticker. As long as that model number is tested, listed and certified by UL or SEI laboratories, fire departments can purchase it. Therefore, when Cal/OSHA comes in and does an investigation, fire departments would not be liable for not having a NFPA certified helmet. For him, that is the goal.

Jeremiah Herterich, Bullard, stated, for laboratory testing and certification, Bullard tests the assembled helmet. As a manufacturer, what is being discussed is doable, but cost is indeterminate. Bullard is willing to meet a specific parameter if put into place by the State. It does so with other locations and states throughout the United States, for example working with PFAS-free issues, potential removal of the eye protection. Since there has been no set standard or implementation from a state, Bullard is willing to work with the end users. However, Bullard does need to have clarification to do that.

Jeremy Lawson, CAL FIRE, agreed that the issue is how to maintain current manufacturer testing requirements across multiple states while allowing California fire departments flexibility to purchase helmet components that would be equivalently protective once assembled.

Jeremiah Herterich, Bullard Safety, expressed concern about inconsistent requests to manufacturers among California fire departments creating operational and compliance challenges. Another person agreed this was a valid point.

The **Chair** did not think fire departments within California would be able to come up with a consistent standard or expectation. What is being proposed is an exception to the NFPA 1970 requirement; the exception would allow departments to build their own set using all NFPA-approved parts.

Jeremiah Herterich, Bullard Safety, asked for clarification whether it would be possible for fire departments, for example, to provide their own eye protection and head protection but discontinue ear protection?

The **Chair** explained that fire departments would be able to buy whole sets or assemble their own set using NFPA-approved equipment.

Jeremiah Herterich, Bullard Safety, was concerned that while eye, face and ear protection would be required, there would be no ear protection except for using a hood or hood-based system.

The **Chair** explained the different versions of the Exceptions to subsection (a) that the committee is considering. The red version was from CAL FIRE; the blue was OSHSB's

attempt to rephrase the Exception while considering CAL FIRE's concern and the NFPA standard.

Chad Christensen, LA County Fire Department, supports the language submitted by CAL FIRE for Exception 3. He would support adding the requirement to purchase certified eye protection. He does not support the Chair's proposed language for Exception 3.

Mason Crist, Kern County Fire Department, is in support of language submitted by CAL FIRE and being able to purchase a helmet by itself without components they would not use.

Angel Sanchez, Phenix Technology, stated that NFPA 1970, 4.2.4: "The certification organization shall refuse to certify products to this standard that do not comply with all applicable requirements of this standard." (2025 ed, p 1970-29) He asked how the proposed regulatory language would work. There are a few dozen OSHA Nationally Recognized Testing Laboratories (NRTL). Does the State really want to specify the laboratories?

The OSHSB proposed language puts the onus on the fire departments to validate that components meet the testing requirements. If the certifying laboratories are added, he doesn't know if the manufacturer would be able to validate that because the NFPA interface language says it has to be complete. How would the components be validated and certified if the standards are so stringent about the interface being complete?

Another potential issue is getting into the elements. For example, Bullard probably uses InnerZone and FirePro ESS goggles. Phenix only tests FirePro because that is what they decided to carry. If you use InnerZone goggles with a Phenix helmet, then it is no longer NFPA compliant. The "sticker" would not be possible.

Robert Sestito, Sacramento Metropolitan Fire District, asked if Bullard InnerZone is good and someone can put the InnerZone with your helmet as an ala carte as opposed to a set.

Angel Sanchez, Phenix Helmets, was concerned about the CAL FIRE-proposed language of "minimum performance requirements." The minimum performance requirements are extremely specific and state the entire thing must be tested. The OSHSB-proposed language seems to indicate that it is acceptable if you can show the other elements are compliant to that standard.

The **Chair** agreed with Angel Sanchez. She stated that she read CAL FIRE's proposed Exception and Appendix B3 and came to the same conclusion as Angel Sanchez. The testing requirements require the set components to be tested as a whole system. CAL FIRE's red text can be interpreted that the selected NFPA approved components with the selected helmet needs to be subjected to SEI or UL testing.

The intent of the OSHSB proposed language is to achieve CAL FIRE's request to purchase helmet and the other components separately. One way or the other, the helmet shell must be the same quality as NFPA 1970 standards. The "note" is meant to clarify the "certified, previously certified or no longer certified" language.

Angel Sanchez, Phenix Helmet, said that it seems like the burden of proof is lessened for fire departments because if the helmet is compliant, then that is enough proof that the five components are compliant as well.

The **Chair** stated that the individual elements like eyeglasses would have some kind of label. Only the shell would not have any kind of labeling.

Jim Reidy, Texas State Association of Firefighters, asked if the intention of the group is to allow a firefighter to get a Phenix helmet and use with it a different eye protection that was not certified with the helmet.

The **Chair** affirmed the proposed language is written to allow a Phenix helmet to be paired with any NFPA-approved eye goggles a fire department wants to purchase.

Several committee members were concerned that the other components are not tested individually.

John Morris, 3M, Scott Fire & Safety, stated the CAL FIRE version specifies UL and SEI as certifying authorities. UL does most testing themselves, while SEI uses outside laboratories as part of their process.

Ryan Leman, Phenix Technology, recommended changing CAL FIRE's proposed language to allow for any laboratory recognized by federal OSHA as an NRTL.

Jeremy Lawson, CAL FIRE, shared that currently in California a structural helmet does not have to be purchased with what would be considered primary eye protection. Fire departments in California commonly buy them with goggles, not face shields. He stated that a face shield does not meet any eye protection requirement for Cal/OSHA. Removal of the goggles does not mean we are not going to have eye protection, because he could buy a helmet that meets NFPA and Cal/OSHA standards without eye protection.

Then someone from the committee asked if CAL FIRE provides eye protection?

Jeremy Lawson, CAL FIRE, answered "yes," in the same way that they are requesting in this language to do.

Richard Wiese, SAFER, asked if CAL FIRE never in their history had ear flaps.

Jeremy Lawson, CAL FIRE, answered, correct.

Richard Wiese, SAFER, stated, so there's no data to show us by having additional protection that you can reduce your burns or neck burns.

Jeremy Lawson, CAL FIRE, replied that CAL FIRE does not have any of those injuries.

Richard Wiese, SAFER, asked if we're taking away protection at what reason for health, safety or cost?

Jeremy Lawson, CAL FIRE, replied that CAL FIRE is not taking away any protection. What our data shows is that -

Richard Wiese, SAFER, said that the rest of the 49 states have it.

The **Chair** said that the helmet will be revisited.

Jeremiah Herterich, Bullard Safety, regarding the helmet situation, if Bullard understand what is being expected of us, then we will see what we are capable of doing in order to meet that standard. As of now, we don't know what that is because we haven't crossed that line just yet.

Chad Christensen, LA County Fire Department, replied that he thinks the goal of ours is to not impact testing and the testing entities' costs. He would like to be able to purchase helmet X without eye protection, without ear flaps. He wants a certification from a lab or certification agency so that if Cal/OSHA comes in to do an investigation, the organization can that it was certified because it was certified by a laboratory and provide a model number. He stated that they chose to go without ear protection. They chose to go without eye protection for the purchase of this helmet. They will be responsible for purchasing eye protection and our ear protection. For as long as he has been at LA County Fire, they have used hoods, no ear flaps.

Jeremiah Herterich, Bullard Safety, asked if the fire department will write in a formal request to get the exception—or does the department have a plan with Cal/OSHA on how to meet this particular standard?

The **Chair** and **Jeremy Lawson, CAL FIRE**, replied, No.

Jeremy Lawson, CAL FIRE, added that the helmet that CAL FIRE would be purchasing would not come with NFPA stickers.

The **Chair** replied and confirmed that the helmet would not have the NFPA sticker because the helmet is no longer certified. The Chair clarified that if granted, the ability to purchase items separately does not permit the employer to not provide the other PPE components. Section 3403 states that PPE needs to be provided. Subsection (b) states that head protection shall be provided to each firefighter. It starts with eye protection, ear and neck protection and body protection.

The issue is whether organizations can buy the helmet as a set or can they buy components individually, which is what CAL FIRE, LA County and Kern County want. The proposal to allow for purchasing components separately would be an exception to section 3402.1, which requires purchases of PPE to meet NFPA 1970, 1971 standard.

The Chair pondered a hypothetical scenario where Cal/OSHA had to investigate an injury. It's plausible that the inspector would ask, "What were the employees wearing? What kind of protections did the employees have?" The inspector would check if ear and eye protection were worn. They would see whether eye/face protection is NFPA approved, But then the helmet doesn't have a sticker or the certification that it's NFPA approved. This would lead the inspector to ask what kind of helmet is being provided. CAL FIRE then has the burden to contact the manufacturer—or the retailer that they bought it from who will probably contact the manufacturer. It is in CAL FIRE's best interest to have these documents ahead of time right while they're purchasing it that says that this exact same helmet was part of a prior certification that met the NFPA in 1970, but it's just not being sold with all those other parts.

Jeff Knobbe, Bauer Compressors, asked if the entities that are asking for the exception because they want to put on their own goggles, ear and neck protection. He asked for confirmation if the Chair was in agreement with that and that it still doesn't alleviate their responsibility to putting those items either on the persons or on the helmet—they still have to do that.

The **Chair** confirmed that the employer still needs to provide the other components.

Jeff Knobbe, Bauer Compressors, followed up, in a scenario if I buy a helmet that is tested if you or you provide that certification. Is the fire department required to put on ear and neck protection?

The **Chair** replied that fire departments are required to do what that standard says. If they're in a situation where they need to wear that eye protection, because there's a hazard to the eye and there's a hazard to the neck, then the employer is required to provide those items.

Jeff Knobbe, Bauer Compressors, followed up with a hypothetical scenario and asked if Z Fire Department buys a helmet with no goggles, no ear protection and then issues that to the employee of the Z Fire Department, then is Z Fire Department required to give them eye protection that meets NFPA 1970 and required to give them an ear and neck protector that meets NFPA 1970? Are employees obligated to wear that ear and neck protection on that helmet while they're wearing it? That's what the Chair says the standard requires.

The **Chair** replied that the type of PPE required would be dependent on the hazard assessment.

Jeff Knobbe, Bauer Compressors, posed a scenario, if you respond to a call and you're going to go inside a structure, like, hold on, stand by while I install my neck gear protector before I go into the emergency scene?

The **Chair** disagreed with the scenario Jeff painted. She reminded the committee about the previous discussion that requires PPE to be in the location of readiness.

Jeff Knobbe, Bauer Compressors, stated it does not alleviate the responsibility of the firefighter from wearing that piece of equipment on that helmet. They still have to wear it. It has to be in the state of readiness.

The **Chair** replied and used a hypothetical situation. If an employee got injured, one of the things that the inspector is going to look at is what kind of PPE are they wearing. If an employee not wearing eye protection was exposed to an arc flash fire due to electrical lines, wildfire situation, then a citation will be issued for not providing eye protection to that employee. The exception doesn't exempt the employer from providing PPE just because the helmet was not purchased as a set.

Jeff Knobbe, Bauer Compressors, asked, in the same scenario, if the employees got burned on the neck or ear and the inspector found that they were not wearing the ear and neck protector, then should a citation be issued?

Chair replied yes. CAL FIRE and LA County understand that they are required to provide the PPE necessary to protect their employees. The Chair stated that in certain situations, for example, the employer's hazard assessment doesn't require a type of PPE, then you don't have to wear it. The kind of PPE that they might wear for a vehicle incident will probably be different from the set of gear that they're going to wear to respond to a structural fire. In both cases, employers must provide those protections. So the exception does not excuse the employer from providing those protections.

Regarding the red text "[Appendix B3, Table B.3, sections 7.4.1 through 7.4.5, 7.4.7 through 7.4.14, 7.5.6, and 7.5.9, as documented by a UL and/or SEI laboratory\[,\]](#)" some of these testing requirements require that all the different components are in place to perform the test listed in the section. For the thermal resistance shrinkage resistance test, the helmet has to be tested with all the components in place. For this reason, the Chair proposed the language in blue.

The Chair moved on to personal alert safety systems (PASS) and SCBA. Subsection (g) and subsection (h) are proposed to be deleted because PASS and SCBA are included in the new NFPA 1970 consolidation.

§ 3402.2

▪ Outstanding Items from Prior Meeting(s)

- The discussion draft was updated to the newly released NFPA 1950, 2025 edition, replacing NFPA 1977.
- Update standard for fire shelter to the latest edition. The Chair revised the text, shown in blue text.
- The Chair confirmed that subsection (c) regarding chainsaw chaps will be deleted, because it is already covered in the current NFPA 1950 standard.

▪ Updated Discussion Draft: §3402.2

§3402.2. Purchase Quality Standards for Personal Protective Clothing and Equipment for Wildland Fire Fighting.

(a) Wildland [and urban interface](#) fire fighting personal protective clothing and equipment ordered or purchased on or after July 1, 2017 **[OAL to insert - 6 months after the effective date]**, shall meet the requirements of the National Fire Protection Association (NFPA) ~~1977-1950~~, Standard on [Personal Protective Clothing and Equipment for Technical Rescue Incidents, Emergency Medical Operation and Wildland and Urban Interface Fire Fighting-Firefighting, 2016-2022](#) [2025](#) Edition, which is hereby incorporated by reference. In addition to any other applicability, the aforementioned purchase quality standards apply to discretionary equipment orders or purchases.

EXCEPTION: Protective ensemble or ensemble elements meeting the most current NFPA 1977 edition will be deemed as meeting the standard.

(b) Purchase Quality Standards for Fire Shelter. Fire shelters ordered or purchased on or after July 1, 2023 [OAL to insert - 6 months after the effective date] shall meet or exceed the U.S. Department of Agriculture, Forest Service Specification, Shelter, Fire (M-2002), 5100-606C_606E, August 22, 2011 [September 1, 2023](#), which is hereby incorporated by reference. In addition to any other applicability, the aforementioned purchase quality standards apply to discretionary equipment orders or purchases.

[Action Item: Update to the latest edition]

~~**(c) Purchase Quality Standards for Fire Chainsaw Chaps. Chainsaw chaps ordered [OAL to insert - 6 months after the effective date] shall meet U.S. Department of Forest Service, Specification 6170-4K, Chaps, Chain Saw, M-2020.**~~

[CalFire requested to delete subsection (c) because US Forest Service specifications are required to meet NFPA standards]

■ Outcome

§3402.2. Purchase Quality Standards for Personal Protective Clothing and Equipment for Wildland and Urban Interface Fire Fighting.

(a) Wildland and urban interface fire fighting personal protective clothing and equipment ordered or purchased on or after July 1, 2017 **[OAL to insert - 6 months after the effective date]**, shall meet the requirements of the National Fire Protection Association (NFPA) ~~4977-1950~~, Standard on Personal Protective Clothing and Equipment for Technical Rescue Incidents, Emergency Medical Operation and Wildland and Urban Interface Fire Fighting-Firefighting, ~~2016-2022~~ 2025 Edition, which is hereby incorporated by reference. In addition to any other applicability, the aforementioned purchase quality standards apply to discretionary equipment orders or purchases.

EXCEPTION(S) to subsection(a):

1. Protective ensemble or ensemble elements meeting the most current NFPA ~~4977~~ 1950 edition will be deemed as meeting the standard.
2. Technical Rescue Incidents PPE
3. Emergency Medical Operation

(b) Purchase Quality Standards for Fire Shelter. Fire shelters ordered or purchased on or after July 1, 2023 [OAL to insert - 6 months after the effective date] shall meet or exceed the U.S. Department of Agriculture, Forest Service Specification, Shelter, Fire (M-2002), 5100-606C_606E, August 22, 2011 [September 1, 2023](#), which is hereby incorporated by reference. In addition to any other applicability, the aforementioned purchase quality standards apply to discretionary equipment orders or purchases.

▪ Discussion

The **Chair** is proposing to change the title of section 3402.2 to include wildland and urban interface to capture the changes to the 1950 standard and be consistent with the naming of that standard. The NFPA standard is being replaced with the newest one, from NFPA 1977, 2016 edition, to NFPA 1950, 2025 edition. NFPA 1950 combines technical, rescue, emergency medical operation and wildland urban interface firefighting. But notice, on subsection (a), “Wildland and urban interface fire fighting personal protective clothing and equipment ordered or purchased” was very deliberate. It always says Wildland and Urban Interface Firefighting to remain consistent with the scope of Article 10.1.

Jeremy Lawson, CAL FIRE, asked why are we adding in things like tech rescue and the EMS standard portions of that, of what will be 1970, into this regulation?

The **Chair** replied that they are not being included in the standard. They are mentioned because of the name of the NFPA standard. The existing scope will cover wildlife and wildland urban interface firefighting. If the committee prefers, just to make things clear, exceptions to subsection (a) can be created. The Chair added the two exceptions: technical rescue and emergency medical operations.

The Chair added that NFPA 1950 is a combination of three standards. Historically the rule covered wildland firefighting. Now there's wildland-urban interface. NFPA is switching to that terminology and creating specialized PPE for wildland-urban interface firefighting.

§ 3402.4

▪ Updated Discussion Draft: §3402.4

§3402.4. Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting (NFPA 1851, 2014 Edition).
[Text in section 3402.3 was moved to section 3402.4 and the title of the section changed]

(a) Structural and proximity fire fighting protective ensembles shall be selected, inspected, and maintained in accordance with the National Fire Protection Association (NFPA) 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2014 Edition, which is hereby incorporated by reference.

EXCEPTION: (1) In addition to the recordkeeping requirements of subchapter 4.3 of Chapter 4, Program of the NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2014 Edition, which is hereby incorporated by reference, the employer shall maintain records on its structural and proximity fire fighting protective ensemble and ensemble elements for three years from the date of retirement.

(c) **Effective Operative** Dates

(2) Chapter 10 (Retirement, Disposition, and Special Incident Procedure) of NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2014 Edition, which is hereby incorporated by reference, and subsection (b) shall be **effective operative** January 1, 2026.

Review of previous meeting changes confirmed.

▪ **Discussion**

The Chair confirmed the “EXCEPTION” will be replaced with (1), because the text in (1) is not an exception it is in addition to the record-keeping requirements.

The Chair confirmed that in subsection(c), the word “Effective” was being replaced with “Operative” to make a distinction between implementation deadlines for NFPA chapters versus the effective date of the rulemaking as approved by the Secretary of State.

§ 3402.5

▪ **Outstanding Item from Prior Meeting(s)**

Mike Loput and Jim Evans to provide alternate language to Exception to (h)(1) to further clarify when preliminary exposure reduction (PER) is not feasible.

▪ **Updated Discussion Draft: §3402.5**

§3402.5. Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting (NFPA 1851, 2020 Edition).

(a) The employer shall establish and implement the procedures and requirements National Fire Protection Association (NFPA) 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2020 edition, which is hereby incorporated by reference without the Annex, except for A 5.1.5.

NOTE: Any mention of chapters and subchapters in this section are in reference to the NFPA 1851 standard, 2020 edition.

(b) Non-NFPA certified head protection shall be retired 10 years from the date of manufacture.

(c) Training

(2) Training records demonstrating the implementation of subsection (c)(2) shall be made available to the Division within seven days upon request. Records shall be kept as required by section 3203(b)(2).

(h) Cleaning and Decontamination.

(1) Preliminary exposure reductions (PER) shall be carried out by the end user of the PPE as required by chapter 7 Cleaning and Decontamination, subchapter 7.2.2.1 of the NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2020 edition.

Note to EXCEPTION to (h)(1): Examples of where exposures are incurred that create danger for employees or the public include: heavy vehicle traffic areas, rural areas with challenges such as terrain, areas or conditions where environmental risk factors would prohibit PER, weather conditions (heat/cold exposures) that may pose a risk to the health and safety of employees, situations where PER would cause a potential health and safety issue for the employee or public (such as a significant HAZMAT exposure, fentanyl, lithium, etc.), situations that would impede the duty to act and render aid or service to the public in a timely manner.

Discussion:

This Chair stated that this section contains the later edition of NFPA 1851. Proposed subsection(b) will remain if in the end, the proposal allows for the purchasing of non-NFPA certified helmet. Subsection(b) for now is still a placeholder. NFPA 1851 requires the retirement of PPE 10 years from the date it was manufactured. To be consistent, non-NFPA approved helmets if permitted, will also be retired 10 years from the date of manufacture.

Subsection(c)(2) was language from the last meeting, which is consistent with the documentation requirements as section 3203(b)(2)

Subsection (h)(1) has an editorial correction. Preliminary exposure reductions can be referred to as PER.

Mike Loput and Jim Evans proposed an alternate language to the Exception to subsection(h)(1) in red.

Jim Evans, Solution Safety stated that PER is a really good idea, but there are lots of situations where you're not going to be able to do that. And it's not from a regulation standpoint. That's an internal Standard Operating Procedures (SOP) on how you want to do it. What we were looking at here was, how would an enforcer from the state look at it. Did you do this? Did you not do it at the scene? Why didn't you do it at the scene? And we thought that we should give some broad scope language for the group to look at.

The **Chair** stated the intent was to clarify what "as soon as practically possible" mean and what infeasible mean?

Robert Sestito, Sacramento Metropolitan Fire District stated that he agrees with everything and both the exceptions realistically. I just have a question for the group. Regarding the second exception, there are two statements. The first statement is about the inability for the employee to PER. The second one is about how PER would cause potential hazards to the community.

Does the first portion limit the department's ability to not do PER by defining specific areas? The first one, because it's broader, gives departments leeway to identify hazards within their geographical scope specifically that would allow them to not do PER?

He was uncertain that by adding specific items, if that creates limitations. He wondered if adding broader language would be better. CAL FIRE could recognize situations where PER would cause a potential health and safety issue that are specific for CAL FIRE. Kern could identify situations specific to Kern. LA County the same.

The **Chair** considered Robert's comment and proposed that the exception does not need to be an alternate language, rather a continuation of thought.

Where an employer can demonstrate that it is infeasible to perform preliminary exposure reductions immediately, preliminary exposure reduction shall be performed as soon as practically possible.

Examples of where exposures are incurred that create danger for employees or the public include but not limited to: heavy vehicle traffic areas, rural areas with challenges such as terrain, areas or conditions where environmental risk factors would prohibit PER, weather conditions (heat/cold exposures) that may pose a risk to the health and safety of employees, situations where PER would cause a potential health and safety issue for the employee or public (such as a significant HAZMAT exposure, fentanyl, lithium, etc.), situations that would impede the duty to act and render aid or service to the public in a timely manner.

Robert Sestito, Sacramento Metropolitan Fire District agreed with the Chair's proposal. Because it's just examples, it would give an employer the ability to list things outside of that. I just didn't want it to limit and be like, oh no, it has to be those things. I'm sure there's things in people's specific counties or in people's workflow that aren't on there.

Jeremy Lawson, CAL FIRE added to Robert's point, maybe examples may include but are not limited to.

The Chair stated that rather than being an alternate language. The language drafted by Mike and Jim is a continuation of the Exception to subsection(h)(1). OSHSB may have to further edit the red text, but we're going to keep the intent. We're going to keep all these examples.

Review of New Amendments

Discussion Draft:

§3403. ~~Head, Eye and Face Protection.~~ Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting.

(a) General. In-service protective ensembles shall meet the requirements of National Fire Protection Association (NFPA) 1971, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2013, 2018 edition and-or NFPA 1970, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, Work Apparel, Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services, and Personal Alert Safety Systems (PASS), 2025 edition which is hereby incorporated by reference.

Outcome:

The amendments were accepted.

▪ **Discussion**

The **Chair** stated that section 3403 is for in-service PPE. For consistency, these changes are because of the NFPA in 1970. Subsection (a) is a listing of NFPA approved PPE that are acceptable. Depending on when the rulemaking is approved, the 2013 edition may be deleted because of the 10-year service life of the PPE.

§ 3403(a)(b)

▪ **Updated Discussion Draft: § 3403(a)(b)**

§3403. ~~Head, Eye and Face Protection.~~Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting.

~~(a)(b)~~ Head Protection. Head protection shall be provided to each fire fighter, and shall be maintained in a location of readiness for immediate response to fires and like emergencies. Head protection shall be worn by fire fighters whenever they are exposed to head injury hazard. Head protection is normally provided for fire fighters through the use of helmets.

(1) In-Service Head Protection—shall be one of the following:

(A) Fire fighting helmets shall meet the certified as meeting NFPA 1971, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2013 or 2018 edition and is within 10 years from the date of manufacture.

[The 2013 edition will be deleted if the proposal is not noticed by 2026. Helmets purchased in 2017 (meets NFPA 1971 2013) have a 10 year life.]

(B) Fire fighting helmets certified as meeting NFPA 1970, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, Work Apparel, Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services, and Personal Alert Safety Systems (PASS), 2025 edition and is within 10 years from the date of manufacture;
or

(C) Non-NFPA certified helmets purchased under the Exception to Section 3402.1(a) and are within 10 years from the date of manufacture.

- **Outcome**

Proposed language was accepted.

- **Discussion**

The **Chair** stated that the subsection states the head protection that should be in-service. (A) included an updated NFPA edition, (B) NFPA in 1970 with a 10 year service life and (C) if the committee can come to a consensus.

§ 3403(b)(c)

- **Updated Discussion Draft: §3403(b)(c)**

§3403. Head, Eye and Face Protection. Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting.

(b)(c) Eye and Face Protection.

(1) Eye protection and/or face protection shall be provided to **each fire fighter** and used by **each fire fighter as directed** to protect from eye or face injuries such as punctures, abrasions, contusions, or burns ~~as a result of~~ resulting from contact with flying particles, hazardous substances or projections which are inherent in the workplace or environment.

- **Outcome**

Confirmed bold text.

- **Discussion**

The Chair reviewed previous meeting changes and reconfirmed the previously agreed upon language in bold.

§ 3403(e)-(g)

- **Outstanding Items from Prior Meeting(s)**

Revise text to be consistent with subsection (c)(1) and add “each fire fighter” and “used as directed.”

- **Updated Discussion Draft: §3404(e)-(g)**

§3403. Head, Eye and Face Protection-Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting.

(e) Body Protection. Body protection shall be provided to [each fire fighter](#) and used [as directed](#) by ~~each fire fighter~~ when exposed to the hazards of structural fire fighting and proximity fire fighting activities. Body protection shall consist of structural or proximity fire protective garments.

(f) Hand and Wrist Protection. Protective gloves shall be provided to [each fire fighter](#) and used by each fire fighter [as directed](#) when exposed to the hazards of structural fire fighting and proximity fire fighting activities. Such protective gloves shall be suitable to the hazards encountered in fires and fire related emergencies. [From §3406(a)]

(g) Foot Protection. Foot protection shall be provided to [each fire fighter](#) and worn [as directed](#) by fire fighters while engaged in structural fire fighting and proximity fire fighting activities. [From 3407(a)]

- **Outcome**

Amendments were accepted.

- **Discussion**

The Chair showed the committee the edits to include “each fire fighter” and “as directed.”

§ 3410.2(a)

- **Updated Discussion Draft: §3410.2(a)**

§3410.2. Selection, Care, and Maintenance of Protective Ensembles for Wildland Fire Fighting (NFPA 1877, 2022 Edition).

(a) The employer shall establish and implement the procedures and requirements of NFPA 1877, Standard on Selection, Care, and Maintenance of Protective Ensembles of Wildland Fighting Clothing and Equipment, 2022 edition, which is hereby incorporated by reference excluding [the Annex](#), sections 4.3, 4.5.3, 7.1.2, 7.1.3 **7.3.2**, and 10.2.22(2) and Annex.

[NOTE to subsection \(a\): See subsection \(d\)\(1\) for the requirement that replaces 7.3.2, which permits the machine washing.](#)

- **Outcome**

Prior changes confirmed, and new amendments were accepted.

- **Discussion**

The Chair stated that explained that subsection (a) incorporates NFPA 1877, 2022 edition, by reference excluding the proposed exceptions. Editorial corrections were made to the previous version and a Note was added to regarding 7.3.2.

[After the meeting, the Note was deleted during the internal review process.]

§ 3410.2(b)(3)

- **Outstanding Items from Prior Meeting(s)**

California Professional Firefighters will submit proposed text to add to subsection(b)(3) regarding training

- **Updated Discussion Draft: §3410.2(b)(3)**

§3410.2. Selection, Care, and Maintenance of Protective Ensembles for Wildland Fire Fighting (NFPA 1877, 2022 Edition).

(b) Program for the Selection, Care, and Maintenance of protective ensembles

(3) Employees shall be trained on in the importance of decontamination to reduce dermal exposure to chemicals.

- **Outcome**

CFP withdrew from adding amendments to subsection (b)(3).\

§ 3410.2(b)

- **Outstanding Items from Prior Meeting(s)**

The Chair will consult with OSHSB's legal department regarding CPF request to be notified in addition to the employer upon discovery of a health and safety concern regarding PPE.

- **Updated Discussion Draft: §3410.2(b)**

§3410.2. Selection, Care, and Maintenance of Protective Ensembles for Wildland Fire Fighting (NFPA 1877, 2022 Edition).

(b) Program for the Selection, Care, and Maintenance of protective ensembles (Chapter 4 of NFPA 1877).

(4) Reporting PPE Health and Safety Concerns.

(A) To implement chapter 4 Program, subchapter 4.6.1 of the NFPA 1877, Standard on Selection, Care, and Maintenance of Protective Ensembles of Wildland Fighting Clothing and Equipment, 2022 edition, the organization or employer shall notify the manufacturer and the certification organization in writing within 20 business days upon discovery of the PPE health and safety concern caused by a known or suspected element failure.

(5) Records.

(B) Training records demonstrating the implementation of subsection (b)(2) shall be made available to the Division within seven days upon request. Records shall be kept as required by section 3203(b)(2).

▪ **Outcome**

CPF's request for notification is something that the union can bargain for, therefore there was no change to the proposed text. Previous meeting edits were confirmed.

§ 3410.2(c)(1)

- **Outstanding Items from Prior Meeting(s)**
- **The Chair to check with CAL FIRE if the subsection(c)(1) is still current. Updated Discussion Draft: §3410.2(c)(1)**

(c) Selection.

(1) Employers or fire departments that choose to adopt the findings of the risk assessment performed by California Department of Forestry and Fire Protection (CAL FIRE) from January 2010 shall be deemed as meeting chapter 5 Selection subchapter 5.1.1 of the NFPA 1877, Standard on Selection, Care, and Maintenance of Protective Ensembles of Wildland Fighting Clothing and Equipment, 2022 edition. CAL FIRE predicted a Reasonable Maximum Exposure (RME) of 7.1 kilowatts per square meter (kW/m²), which necessitated a minimum Radiant Protection Performance value (RPP) value of 10 and Total Heat Loss (THL) of 500 watts per square meter (W/m²)

▪ **Outcome**

CAL FIRE will send the new risk assessment. *[CAL FIRE sent new risk assessment published July 2025.]*

- **Discussion**

The **Chair** asked Jeremy if another risk assessment is scheduled?

Jeremy Lawson, CAL FIRE, replied that he has to approve it.

Hannah Billows, CAL FIRE, stated that the assessment is completed and it's in the approval process

The **Chair** asked if the criteria are the same or different.

Jeremy Lawson, CAL FIRE, stated that there were some changes.

Hannah Billows, CAL FIRE, stated that the way it's proposed currently, the RPP is still 10 for wildland jackets, pants and trousers and the THL is still 500, but accepts a 5% variance, same as the NFPA, which requires a THL of 500, but with the 5% variance, which amounts to a minimum of 475.

The **Chair** asked CAL FIRE to send a copy to OSHSB; it will be a document relied upon. The Chair informed the committee that fire departments may base their criteria for their selection of PPE on CAL FIRE's risk assessment.

§ 3410.3

- **Updated Discussion Draft: §3410.3**

§3410.3 Personal Protective Equipment for Wildland Fire Fighting.

(a) Head Protection.

(2) In-service Helmets. Head protection shall conform to one of the following:

[\(B\) National Fire Protection Association \(NFPA\) 1950, Standard on Personal Protective Equipment for Technical Rescue Incidents, Emergency Medical Operations, and Wildland and Urban Interface Firefighting, 2025 Edition, which is hereby incorporated by reference.](#)

- **Outcome**

Accepted.

- **Discussion**

The **Chair** stated that the proposal was amended to add helmets approved under NFPA 1950 to be included in the list of in-service head protection.

§ 3411(d)

▪ Updated Discussion Draft: §3411(d)

§3411. Private Fire Brigades.

(d) Personal Protective Clothing and Equipment shall be provided by the employer at no cost to the employee in accordance with this article commensurate with the fire fighting activity involved. With respect to structural fire fighting by private fire brigades, those personal protective clothing and equipment requirements shall be in accordance with Ssections 3402.1, 3402.3, **3402.4, 3402.5**, 3403, ~~3404, 3405, 3406, 3407, 3408, and 3409~~, **3410, 3410.1, 3410.2, and 3410.3**

▪ Outcome

Confirmed amendments.

▪ Discussion

The Chair stated that the section pertains to private fire brigades. The proposal updates the section number.

DAY TWO

Agenda

1. Request for Comment(s). Walking Working Surfaces.
2. Hoods. There was a request to allow proximity hoods for structural firefighting.
3. Helmets
4. Cost survey

Request for Comments (Revisited): Hose Drying Tower Exception for Walking Working Surfaces, Section 3210

The Chair revisited her announcement made the day before. Section 3210, Guardrails at Elevated Locations, is part of the Walking-Working Surfaces Rulemaking. There is an Exception in section 3210(a) regarding hose drying towers. If there are no comments or feedback from the fire departments, the exception will be deleted. There were no comments.

Hoods

▪ References

1. Stull, Jeff and Matt Cox. *“What You Need to Know Now about the NFPA 1970 Consolidations: How Changes in the New NFPA Standards for Turnout Gear and SCBA Will Affect the Fire Service.”* June 2024.
2. “Firefighter Protective Hoods: An Ongoing Evaluation Amid NFPA 1971 Changes.” July 20, 2023.
3. Stull, Jefferey O. “Changes Challenging PPE Choices and Care.” July 1, 2025.

On page 9 of Reference 1 is a picture of a test that was done by International Association of Fire Fighters (IAFF) a long time ago. The study was to determine where particulates entered the body. The picture in the handout shows that particulates enter the body through the neck area (see fluorescent color). This study prompted the use of particulate-blocking hoods.

The referenced article 2, written in 2023, details the history of the evolution of the hood. NIOSH conducted a health hazard evaluation program where firefighters wore clean gear and were subjected to firefighting exercises (fought a controlled burn). Then, they measured the level of various chemicals in their body. They arrived at the conclusion that chemicals were entering the body through the skin.

The new hood requires that 90% of the particulates that are 0.1 to 1.0 microns are blocked. The article summarizes the impact (see page 4). Many two-layer hoods will not meet the NFPA requirements. Some firefighters have complained that the hood inhibits the ability of the user to hear. The lack of elasticity has also meant that new doffing techniques must be applied for this hood. The noise was related to the material used to make the hood.

▪ Discussion

The **Chair** asked if any of the departments are using particulate blocking hoods.

Robert Sestito, Sacramento Metropolitan Fire District, responded that they have been using them. He responded that they have both technologies.

The **Chair** asked if there were any complaints.

Robert Sestito, Sacramento Metropolitan Fire District, responded that the original versions of the Gore hood, which used an actual barrier material, were very loud. SMFD chose not to go with those. They have a second version of another technology that used a fluorinated barrier. They got rid of those at one point, and then SMFD is in one of the next Nano(?) now. For the most part, it operates the same as our prior ones.

The **Chair** followed up and asked if they are happy with the hoods.

Robert Sestito, Sacramento Metropolitan Fire Department, replied, yes, they have about four per firefighter and approximately 3,000 in service.

The **Chair** asked if anybody else could share their experience?

Jim Riedy, Texas State Association of Firefighters, said that San Antonio's been using them since the first iteration. He chaired the original task group that did the optional particle blocking hoods. They have had them ever since the beginning. They are probably using the fourth generation of those hoods right now, and the noise issue is specific to that Gore technology. It's not specific to the other ones. Other materials are all available.

The fluorescent aerosol screening test (FAST) was done with a set of five-year-old gear and PBI two-layer hoods. That is the kind of penetration you get through the soft hoods. He knows this because they used our gear to do it. According to a study done by Dr. Stuart Baxter, the neck and face area was of particular concern to the committee because of the absorption rates in that area. That's the second, third and fourth most absorbent areas on your body after your Netherlands. The committee concluded that the neck and face area was last spot that wasn't protected from the outside.

The 20 Thermal Protective Performance (TPP) still stands as the minimum. The 325 THL was to make it above any composite environment at the time so that it wouldn't be breathable and nobody would take a piece of bunker gear, sew it into a hood and wrap it around their heads. They have used it successfully and are on a fourth generation. The NanoFlex is a pretty good one. Durability of the laminated products, either dot lamination or full lamination, is 90%, 95%.

Chad Christensen, LA County Fire Department, said that LA County has evaluated particulate blocking hoods over the years. He thinks the concern from their organization is that there's not enough research done to show how clean the inside of the hood is after single use. If it's blocking 100% of the particulates on the outside, and they separate their turnout coats or outer shells from their thermal liners in the washing process. He asked would he know that particulates are not being captured on the inside of that hood with a particulate barrier and then giving it back to firefighters.

In addition, they're sweating because of the increased heat stress from that extra barrier, and their pores are now even more open. Now those particulates, those carcinogens, are able to get into that same area. The sock hood LA County firefighters currently use blocks 80% of the particulates from getting to the firefighter. This is supported by information he sent to the Chair. All the research shows that good decontamination after firefighting and wipes are the best answer. There are still a lot of questions as to whether the particulate blocking hoods are the best.

He added that they have been asking since 2019 for how clean is clean on the interior of our hoods and still can't get an answer. Again, it's just to give the California Fire Service an option because there will be many fire departments in this state that, one, don't even know the standard exists and, two, don't want anybody to be found noncompliant because they're not completely educated. There are many big

departments in this state that aren't even in this room right now and aren't paying attention.

The **Chair** wanted to summarize the concern. One concerned is about the laundry, and then the second is about the extra heat?

Chad Christensen, LA County Fire Department, agreed. Heat stress is a concern because particulate blocking hoods are not as breathable as the sock hoods. Lastly, the minute a firefighter removes their hood as they normally would, meaning donning that hood back around their neck, the research shows that the effectiveness of that particulate barrier hood is no greater than a sock hood.

Jim Reidy, Texas State Association of Firefighters, replied regarding the cleaning aspect of it, if the reason for not using particulate blocking hoods is because Chad Christensen doesn't think it's clean, then he would defer to Jim Evans. That means that your moisture barrier also doesn't separate from the substrate, yet you put it in and put it back on your people, and it's the closest thing to your body.

Chad Christensen, LA County Fire Department, replied, it gets separated from the outer cell; they get a majority of the contaminants.

Jim Reidy, Texas State Association of Firefighters, rebutted, the moisture barrier and the substrate are together, and the moisture barrier is inside unless you turn it inside out. But that doesn't matter because the particulate blocking hood is another piece of fabric that gets cleaned. Both sides get cleaned. In the cleaning process, the surfactant will take dirt away. It's no different than any other flat piece of fabric that gets cleaned.

The **Chair** asked Jim Reidy about the heat stress.

Jim Reidy, Texas State Association of Firefighters, replied it's been optional in Texas, and they have about a 90% user rate right now. There's been no documented case of heat stress due to a particulate blocking hood in Texas. If you're going to offset the heat stress aspect of it, which he has never seen any, and that's what the THL is so high for, so it breathes. It's more breathable than actual bunker gear. It's more breathable than anything else firefighters wear. But then the other side to that is the offset against contamination. We want to reduce the cancer contamination that's coming into that open area. That was the one open area in the entire body that had no barrier protecting the skin at all. They use it in South Florida, New Orleans, San Antonio, Tucson, Phoenix, New York City, and there's been no issues with heat stress.

Mason Crist, Kern County Fire Department, replied, no, they have some of the same concerns as L.A. County. They would like more scientific data to back up the cleanliness and everything that comes along with it.

John Morris, 3M, Scott Fire & Safety, announced that there's a NFPA PPE workshop at the beginning of April, and there are multiple presentations on some of these subjects. Check the NFPA website. There is newer research on some of these subjects.

Jim Reidy, Texas State Association of Firefighters, said that anecdotally, across the spectrum, regardless of where you're at, going from a sock hood to a particulate

blocking hood, everybody notes that they don't smell two or three days after the fire because of the off-gassing that comes through the top of your head. This highly absorbent area with lymph nodes, major vessels in your body absorb that in, distributes it and then you off gas it. He would imagine that everybody that's been in a fire knows that regardless of whether you have hair or not, it stinks and you can't wash it off for a couple days because your body is basically off gassing.

The **Chair** said that she was reminded of what Chad Christensen said earlier, the requirement to do preliminary exposure reduction, to use wipes after to remove most of what has deposited in the neck and that's a way to get rid of that.

Michael Loput, LA County Fire Department. said that an exposure is an exposure. Yes, you can remove some of the excess materials on your neck, but once you're exposed, you're exposed. Your body is going to maintain those exposures over the long term. There's not a possibility, and he knows there's a lot of anecdotal evidence of using saunas, wipes, things of that nature. Those are nice to get large particulates off of your skin, but once you're exposed, there is no reducing that exposure. There has been consensus from UCLA and UC Davis for over a decade.

Jim Reidy, Texas Association of Firefighters, said that your absorption rate is 400% higher after the first five minutes. If you're in the firefight for however long it is, five, ten, maybe, you're already absorbing that into your body before you even get the chance to take anything off in rehab and wipe off.

Jim Evans, Solution Safety, asked if Chad Christensen was asking for an exemption or a note that permits the use of sock hoods after more studies and information instead of being forced to use particulate blocking hoods.

Chad Christensen, LA County Fire Department, replied, yes, that's all he's looking for. It's not saying that there's no value in the particulate blocking hood. There is. He thinks there's just a lot of research that needs to still be done to make a confident and educated decision in mandating something that has a lot of questions still out there.

Jim Evans, Solution Safety, said that as part of the advisory committee that's advising the Chair to help make her decision, Chad Christensen's advice is, let's not lock everybody in. The intent of the fire departments is to try to get to the right spot with all the research and not to negate anything that Jim Evan's saying, just the idea.

Jim Reidy, Texas Association of Firefighters, added, the best justice you can do your firefighters in California is to do evaluations. Don't rely on anybody else. Do your own in-house evaluations, do risk assessments. That'll tell you how functional equipment is, how your firefighters feel about it. Some of his firefighters didn't even know they were changing hoods. That was how similar some of those generations were. We have all kinds of scientific data, and the more data that's coming out, it still pointing towards particulate blocking hoods. Nobody's going backwards anymore. Do your justice for your firefighters, and do an evaluation. He would say that there's nothing wrong with NFPA 1970 hoods, and they haven't had any issues anywhere. And he doesn't work for any of these companies at all.

Robert Sestito, Sacramento Metropolitan Fire District, asked, based on his understanding, the new NFPA standards will not allow for any hood to be certified that isn't particulate blocking, correct?

Jim Reidy, Texas State Association of Firefighters, replied "correct."

Robert Sestito, Sacramento Metropolitan Fire Department, said if we were to do an exemption, we would have to write it in a way that allowed the hood to not be NFPA certified. We just can't say that we can have non-particulate blocking hoods because we have to write rules in a way that allows them not to be NFPA certified. There won't be a way to get it certified because under the standard, it has to be particulate blocking.

The **Chair** replied, in the handout, it states that there's an exemption for proximity firefighting. The request is to use the proximity hoods for structural firefighting. The Chair said that she is going to review more studies, then address those specific concerns. The Chair will review studies regarding laundering because of the concern about cleaning. OSHSB will decide on the matter. There will not be another meeting to discuss hoods.

Marcus Meza, LA City Fire Department, suggested obtaining data from medical records to support the actual issues to change policy and to change mandates.

The **Chair** replied that there was already a finding that firefighter work is a very high risk occupation. There are many studies that show that the occupational exposure to chemicals increases the risk to developing cancer.

They were finding high levels of these chemicals in the blood. The head and neck area is an entry point. This is a reason for particulate blocking hoods. Scientists measured chemicals in urine and blood, and there are many studies about that pre- and post-fire. There was a 30-year retrospective study that we discussed back in 2014 that talked about the different types of cancers that firefighters were developing compared to the general public. The committee was presented a study and together determined the necessity in addition to the labor code requirement to move forward with NFPA updates every 5 years.

The request is for leniency regarding the purchase requirements. There are two parts to the standards. One is the purchase quality standard, which requires departments to purchase NFPA-approved equipment. I don't know what Canada uses. Other countries have their own European standard.

L.A. County and perhaps Kern County are asking to allow NFPA 1970 proximity hoods to be used for structural firefighting. So that's their request. Yes?

Jim Reidy, Texas State Association of Firefighters, so the proximity hood, are we talking about the silvers that they're using the aircraft fighters?

Jeremy Lawson, CAL FIRE, stated that they were referring to sock hoods that are certified to be used in proximity firefighting that are basically the same sock hoods that they are wearing today.

Jim Reidy, Texas State Association of Firefighters, clarified, the Navy has an exception for shipboard firefighters because they wear hoods all day long, 12-15 or however many hours. They are the only group that has an exception. Proximity firefighting hoods are the silvers. That's how NFPA defines them.

The **Chair** stated that she will look into all these issues and then make a decision on this item.

Jim Reidy, Texas State Association of Firefighters, added, one more study to consider from the very beginning of the particulate blocking hood when the FAST test was done, the Illinois Fire Service Institute did a hood study specifically for hood absorption and contamination. Their definitive statement was that the contamination they were seeing in blood and urine, urine for sure, was specifically from the neck area contamination. That statement is in their study.

Jim Evans, Solution Safety, said that he does not want to limit their options and be "stuck" for the next five years to six years when a lot of things change, knowing how California law changes. He believes that there is agreement in the use of particulate blocking hoods and that program is really a positive issue.

The **Chair** stated that in California, we review the NFPA standards, which is a national consensus standard. These standards are voluntary. The rulemaking is to require adherence to NFPA standards as a regulatory requirement. The rules will be enforced by Cal/OSHA. The NFPA standards will be incorporated by reference with some exceptions. Texas promulgated their rules on PPE differently. She asked if it was done through the Fire Marshall or Texas OSHA?

Jim Reidy, Texas State Association of Firefighters, shared that there's a Fire Commission in Texas that adopts NFPA standards into law. In Texas, NFPA approved bunker gear or PPE as well as some of the training ones are required by law. (It is not done through the Fire Marshall or Texas OSHA.)

The **Chair** said that the California process is different. The Chair encouraged members of the advisory committee process to read the NFPA standards because sometimes the language might not be as clear or as understandable as a regulation. OSHSB drafts exceptions for or rephrases them so that the language is clear for the fire service. The Chair takes all the comments into consideration.

Richard Wiese, SAFER, stated he was part of that testing group on particulate blocking hoods. Part of the hood was particulate blocking and the other half was not. Several agencies participated in this. We know the absorption rate is very high around the neck, ears and face area. When we took that hood off and you have half and half, you can see drastically the difference between the amount of soot that comes through the hood. That is the exposure. The intent of a particulate blocking hood is to reduce cancer. It cannot be eliminated. He urged the committee to consider, where is the cost associated? Is it on the front end, would you buy something that works better or do you pay for it at the later end? According to studies, it could be 5, 10, 5 years down the road before someone has cancer.

Helmets

The **Chair** asked if there was progress made or thoughts about the ideas on helmet. Helmets have been discussed multiple times at different advisory committee meetings.

Chad Christensen, LA County Fire Department, said last night, the fire service members currently active in California discussed the helmet and agreed on the red language (proposed by CAL FIRE) with amendments. Morris suggested changes regarding certifying agencies.

- **CAL FIRE Proposed Exception 3 to § 3402.1(a)**

3. Helmets not certified to NFPA 1971 shall have the minimum performance requirements per NFPA 1971 Appendix B3, Table B.3, sections 7.4.1 through 7.4.5, 7.4.7 through 7.4.14, 7.5.6, and 7.5.9, as documented by a UL and/or SEI laboratory. Helmets that do not meet the NFPA 1971 shall consist of the following assembled components: shell, energy absorbing system, retention system, fluorescent and retroreflective trim.

- **Discussion**

The **Chair** asked who were included in the consensus.

Chad Christensen, LA County Fire Department, replied, CAL FIRE, Coronado, Kern County, LA City, LA County, Long Beach, Sac Metro, San Diego, Ventura County.

The **Chair** reviewed CAL FIRE proposed text, it states “helmets not certified to NFPA 1971 shall have the minimum performance requirements per NFPA 1971 Appendix B.3, sections 7.4.1 through 7.4.5” The Chair displayed the requirements of Appendix B.3.

Chad Christensen, LA County Fire Department, continued suggesting to change it to NFPA 1970 throughout and then as documented by UL and or SEI certified agencies.

The **Chair** replied that the committee needs to read what is in Appendix B3, what's in Table B3, what's in Section 7.1, 4.1, 4.5, 4.7, and all these. These are the tests that you are asking UL or an accredited laboratory to perform.

Chad Christensen, LA County Fire Department, suggested that In the discussion just to make things easier in rewording that verbiage of if we just changed it to meeting NFPA 1970 and we move remove all of the 3a 3b in the Appendix.

The Chair replied, that NFPA 1970 testing cannot be met without all the components. The test requires the entire helmet system.

Chad Christensen, LA County Fire Department, asked, do we need to call up every single test that's done by its paragraph or by its subparagraph?

The **Chair** replied that the exception that's being proposed by the fire department and the blue is similar at least the first sentence. (Page 8 of the Updated Discussion Draft)

“If an employer purchases a previously certified no longer NFPA 1970 2025 edition” and “Helmets not certified to NFPA 1971 shall have the minimum performance requirements per NFPA 1971 Appendix B3, Table B.3, sections 7.4.1 through 7.4.5, 7.4.7 through 7.4.14, 7.5.6, and 7.5.9, as documented by a UL and/or SEI laboratory.”

“Helmets that do not meet the NFPA 1971 shall consist of the following assembled components: shell, energy absorbing system, retention system, fluorescent and retroreflective trim” versus “certified eye, face, and ear protection, the helmet and these components taken together may meet the purchase quality standards of this section.”

The Chair asked the committee if the text should be “previously certified” or “no longer certified.” If an employer purchases a previously certified, no longer NFPA 1970, 2025 edition, the helmets will meet or exceed the performance requirements as outlined by NFPA 1970. It will be documented by either UL or SEI organizations for safety and protection.

The definition of a helmet in the NFPA standard is different from what you're referring to, right? Because the helmet, the way it's defined in NFPA includes all those different components. NFPA definitions are all incorporated by reference so the definitions that are in the NFPA standards practically govern article 10.1.

Since the test requires helmet's minimum performance requirement as outlined by NFPA 1970, minimum performance requirement as outlined by 1970 uses the definitions in NFPA and the minimum performance requirements of 1970. This pulls all the testing methodology that UL has to perform.

Someone asked if the testing refers to testing performed in California.

Jeremiah Herterich, Bullard Safety, replied, SEI has multiple facilities that they recognize as a testing facility. So if we are making impacts our fire helmets in the state of Kentucky, but the testing facility is in Indiana or Tennessee [muffled] but is recognized under the umbrella of SEI.

Someone asked if we are limiting where we can test it?

Jeremiah Herterich, Bullard Safety, answered his understanding is the testing as listed in NFPA standards take place in UL recommended testing facilities.

Angel Sanchez, Phenix Helmets, asked if text should name specific private industries or should it be a certified body? Appropriate certified, however the wording is. Because what if SEI goes out of business? And now there's only UL, so UL would have a monopoly on testing for fire equipment?

Chad Christensen, LA County Fire Department, said UL and the SEI certification organization are the two recognized certification for testing agencies from federal OSHA's website and standards. He thinks with the ability to allow fire departments in the state of California to purchase helmets without ear flaps and without goggles, it is a fair request that they're tested by one of those two laboratories so that fire department, who does not understand the PPE rule, is ensured that they're getting a helmet that meets or exceeds the 1970 standard and testing standards.

The **Chair** asked Chad Christensen what performance requirements must be checked by the laboratories.

Hannah Billows, CAL FIRE, replied, to address the questions of the definition of helmet she thinks the language could be changed to move up what those minimum assembled components are, instead of having it at the end, and then state that the helmet component shall meet the performance requirements. Does that help with the definition of what a helmet is?

The **Chair** agreed.

Hannah Billow, CAL FIRE, suggested “if the employer purchases a previously certified NFPA-1970. Helmet shall consist of the following assembled components. The shell, energy absorbing system, retention system, fluorescent reflective trim. The helmet component shall meet the minimum performance requirements as outlined by NFPA 1970 as documented by either the UL or SEI laboratory.”

The **Chair** agreed but is still concerned with the proposed text stating shall meet or exceed minimum performance requirements.

Section 8.4.1, located in Chapter 8.4 Protective Helmet Performance Requirements for Both Ensembles, requires protective helmets be tested for resistance to impact as specified in section 9.3.5. Section 8.4.4 is where the goggle component that gets tested is located. The component included in this text is the one that comes in the set.

A previously certified NFPA helmet comes with all the components. A certified helmet is one that has undergone testing requirements as a complete set, with all the components.

8.4.4. Helmets shall be tested for resistance to heat as specified in Section 9.2.4 The following results shall be considered unacceptable:

(9) Dripping of the faceshield/goggle component

The Chair stated, the performance requirements in 8.4 brings in the testing requirements in chapter 9. The Chair asked about the design.

Hannah Billows, CAL FIRE, replied 7.4.

The **Chair** stated that it is important to include the design requirements.

Someone asked about section 7.5.2

The **Chair** replied, section 7.5.2 refers to the definition of the helmet. It is the reason for the Exception.

Jeremiah Herterich, Bullard Safety, asked to add chinstrap as one of the components for the helmet.

The **Chair** talked about the text regarding documentation by either an UL laboratory or SEI certification for safety and protective products? Is there a concern there? No concerns noted. The Chair asked what will the documentation look like?

Chad Christensen, LA County Fire Department, said that they are looking for certification documentation from either one of those laboratories. If it's documenting that the helmet with all the pieces is certified to the 1970 standard, which then will allow our other agencies to purchase that helmet without the eye protection and ear flaps.

The **Chair** asked if the request will be to the manufacturer.

Chad Christensen, LA County Fire Department, stated that the manufacturer would provide the certification letters from one of those two laboratories saying that their helmet meets the standard in Model X, and the fire department will purchase that model without eye protection and ear flaps.

Melissa Sanchez, Phenix Technology In trying to understand this documentation the Chair is requesting members to provide, she had questions. Is it the whole compliance packet that makes sense? But for the standard, we cannot claim the helmet meets specific components of that standard. So what kind of documentation would be looked for, specifically from organizations like theirs, to meet that standard?

Chad Christensen, LA County Fire Department, said that they are looking to verify NFPA compliance to the 1970 standard from SEI or UL laboratories and including all of those components. An organization can choose to purchase basically like the Cal/OSHA helmet that you currently have without the ear flaps and without eye protection and not be impacted by Cal/OSHA when they do an investigation as to why do you not have ear flaps? Why do you not have integrated or attached eye protection on your helmet?

Melissa Sanchez, Phenix Technology, confirmed if the documentation would be the same.

Chad Christensen, LA County Fire Department, replied that except it would be from one of those two laboratories.

Richard Weise, SAFER, stated that it should include more than those two agencies for certification that the State accepts as well. So if there were other ones that could provide that information, those may be included in addition to those two.

Chad Christensen, LA County Fire Department, replied those are the two testing laboratories that federal OSHA recognizes. This is the request of the California fire service active members and the SAFER board.

The **Chair** asked what website Chad Christensen is referring to as it relates to the proposed exception.

Jeremy Lawson and Hannah Billows, CAL FIRE, commented that section 3210.2(f)(2) requires garments be retired 10 years from manufacture and that garments that don't meet the 2011 edition of 1977 be retired by July 1 of 2023. However, under the new section 3410.2 requirements and under the NFPA 1877, there is no 10 year

requirement for PPE retirement for wildland PPE. CAL FIRE asked if they need to continue retiring PPE when the new proposal does not have an expiration.

The **Chair** replied that she will discuss this matter with Cal/OSHA enforcement.

Someone asked when will the proposed text developed by the advisory committee go into effect.

The **Chair** replied that the goal is to get the proposal noticed near the end of 2026, sometime in the last quarter of 2026. There will be a 45-day comment period and possibly 15-day comment period(s). The committee process should help minimize the number of comment periods. If noticed in 2026, it will be effective sometime in 2027.

Jim Evans, Solution Safety, asked about the upcoming release of NFPA 1850, whether the proposal will be updated or will an advisory committee be convened?

The **Chair** replied that she does not know the answer to that question. She does not know how extensive the changes are.

[OSHSB decided not to include the update to NFPA 1850 in this proposal.]

Mike Loput, LA County Fire Department, the California Fire Service fears is, this is why you see the state of Texas becoming an NFPA state versus California having these advisory committee meetings on a regular basis because it's going to be over the continuum of law. The advisory committee is going to meet every two or three years, several times, possibly every time there's a new NFPA edition that needs to come out, and it's not the correct timing or sequence so that we're going to have to then be in a limbo between NFPA release and what California state law is mandating us to do. Unless the advisory committee process continues with the consortium of personnel here from California Fire Service on a regular basis, California will almost be an NFPA state style where we're looking at direct adoption. And that's kind of what's being alluded to is that we don't know whether that's going to happen. If it does result in direct adoption, everything done in the advisory committee kind of gets null and void. Because we're trying to create an in-between so that California Fire Service can continue to operate both financially and with the safety aspects of our membership, it gets very difficult.

The **Chair** replied that the legislature wrote the law instructing Cal/OSHA or OSHSB to review NFPA standards. California will always be at least one edition behind. It wasn't written in the same way as Texas, where the requirements were required through the Fire Commissioner. In California, the revisions are adopted through OSHSB.

Regarding the update to 1850, the Chair will review the changes. If the changes are not significant, then the Chair can review the new NFPA 1850 to create a corresponding exception similar to the proposal the committee has developed. If there are substantial changes or there's something different from what the advisory committee has discussed, then an advisory committee meeting will be convened to discuss key changes of NFPA 1850.

NFPA1850 is the maintenance standard for the entire PPE ensemble, including SCBA. Cal/OSHA is currently responsible for updates pertaining to SCBA and respirators. It is

possible that a joint advisory committee may be convened. Another option is to draft a proposal and send the proposal to committee members for comments via e-mail.

A **committee member** suggested that an advisory committee be reconvened.

Michael Loput, LA County Fire Department, seconded that suggestion, because the committee significantly participated in crafting certain regulatory language, let alone to account for what a massive change NFPA can initiate over a five-year span. Even smaller verbiage can significantly affect the cost and the safety of membership for any fire department here in the room and not in the room.

In his opinion, NFPA is always bleeding edge versus cutting edge. He asked if the advisory committee is in the process where it is able to implement all these changes or is this something in five years. NFPA as an organization at times realizes that they may have stepped a little too fast in one direction. As a member of both committees, he and other members are helping to mandate a massive statewide change for fire service.

He expressed that Texas, while they've made those advances, definitely had to take two steps forward and one step back at times because those changes come directly through law from NFPA. NFPA standards are cyclic, it changes. If we're going to lean into NFPA so heavily to start creating law, then we need to have that same style of meeting on a reoccurring basis.

The **Chair** replied that this is has been the practice, right?

Michael Loput, LA County Fire Department, clarified that he was referring to future meetings.

The **Chair** replied, a series of meetings was convened for version 1 in 2014. This last series of meetings for version 2 was convened shortly after the passage of version 1. There have been six or seven meetings and that is a lot of time and commitment from the members. The Chair thanked everyone for their time and commitment to the health and safety of the firefighters, co-workers, friends and family.

The Chair thanked the first service for protecting life and property. California recently had devastating fires in LA County, Altadena and Palisades, and in previous years, Paradise, Santa Rosa fires. Firefighting is a tough and dangerous job. She is very thankful to all of the advisory committee members. As Chair, she is here to serve as a moderator to guide the fire service through the rulemaking process to protect firefighters.

Michael Loput, LA County Fire Department, wanted to clarify that he thinks this is something that needs to happen. He doesn't agree with creating a comment section within the website to make the fire service aware of an update. Some committee members represent the large fire departments, but many of the smaller ones don't get that opportunity. That's where NFPA has sat forever, making the decisions for large and small. He wants to ensure that it's something that is broadly broadcast loudly and not something that can fly under the radar without any sort of input or with minimal input because people have to be aware of that procedure. He wanted to make sure that this is the thought process for the future to come.

The **Chair** agreed and said unless there's legislation that moves this rulemaking from Cal/OSHA or OSHSB to the State Fire Marshall, then the advisory committee process will continue. The committee will meet and discuss. For those who are members of the NFPA committee, bear in mind that those standards will be incorporated by reference. The more involved members are to the NFPA committee process by raising issues, the less California has to amend.

Kevin Greene, California Professional Firefighters, shared his organization sponsored AB 2146 back in 2014 and stated that he looks forward to future conversations. He said, if we need to make statutory changes to make this a better process, let's do that. CPF understand this is a critically important process. If we can make it through the legislation, let him know and he will bring it to his leadership.

Cost Survey

The Chair informed the committee of the cost survey questionnaire posted on the OSHSB website as a guide. The Chair opened the link documents and reviewed the questions.

Members can amend the survey and change the format. The goal is to capture is how much the changes caused by the new regulatory package are going to cost the fire department [or the person or entity filling out the form]. The Chair believes that the cost of the changes due to the proposal would be related to NFPA 1851 and 1877.

Hannah Billows, CAL FIRE, asked if the regulation's proposed text is changed between when the cost surveys are submitted and when the rulemaking moves forward, will agencies be allowed to submit a revised cost survey if there are changes that affect their costs? For example, if something gets removed during that process and fire departments are no longer allowed to do something and must retire and replace items, do they then have the ability to submit a revised cost estimate on what that's going to actually cost the departments?

The **Chair** replied, the changes to the cost can be submitted during the 45-day comment period. If there is a change that could cost an entity more, they can explain why and how much more it will cost. It is not necessary to resubmit an entirely new cost sheet.

Closing

The Chair will send meeting notes and post-AC text via e-mail. The documents will also be posted on our website. The post AC proposed regulatory text may not necessarily be what will be noticed because it may change during the internal review process. There may be additional Office of Administrative Law requirements to which OSHSB must adhere. There may be changes to the style, grammar, sentence structure, but OSHSB will try to capture what is in the post-AC Text the best way that we can.

Everyone who is on the Chair's mailing list will get notified before the proposal is noticed. There will be the opportunity to send in a 45-day comment if meeting attendees still want to make additional comments. Hopefully the public comments will be minimal

since the proposal was developed through the advisory committee process. The more public comments the Chair receives, the longer it takes for the rulemaking to go through. If it is something urgent that was not discussed at committee meetings, and members think it's important to put it in this package, then submit a comment.

The Chair thanked everyone and concluded the meeting. Meeting notes will be sent to committee members via e-mail. The Chair will also send an e-mail to committee members when the proposal is noticed.