



FIREHOUSE[®]

How to Stay

NFPA 1851 Compliant

for the Life of Your PPE

For fire departments, the real work with NFPA 1851 starts when the new PPE is delivered and continues until it is retired

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Never underestimate a very motivated individual's ability to accomplish something. Take, for example, NFPA 1851, the standard that covers buying, cleaning, maintaining and disposing of firefighter turnout gear. In North America, it would be nearly impossible to buy new turnout gear that wasn't NFPA 1851 compliant. But, never underestimate the highly motivated chief trying to save a few bucks by shopping the back channels.

For the rest of us, that means how and why turnout gear is made the way it is, is out of our hands. The responsibility for meeting NFPA 1851 falls to gear manufacturers. For us firefighters, the heavy lifting comes in the inspection, cleaning, and repair sections of NFPA 1851.

And that is more important now than ever. The most recent revision of 1851, adopted in 2020, included significant changes to how gear is inspected, cleaned, and repaired.

While those changes came in large part to better protect firefighters from cancer-causing agents, they also brought more burden to fire departments to not only follow those rules but to document that those rules were followed. And if that were not enough, the NFPA 1851 technical committee is currently planning for the next revision of the standard,

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due out in 2026. In short, more changes are likely coming.

“PPE protects every fire department’s most valuable asset—its firefighters,” says Robert Tutterow, who is one of the NFPA 1851 committee members and president of F.I.E.R.O., which among other things, hosts an annual PPE Symposium in March.

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So before unpacking a lot of that, what exactly is NFPA 1851’s backstory?

The standard started out in 1975 as a companion piece to NFPA 1971. In 2001, it got a life of its own as the standalone NFPA 1851. In 2008, the standard underwent a complete revision that included both structural and proximity PPE ensembles as well as requirements that third parties verify that independent service providers were properly inspecting, cleaning, and repairing PPE. That revision also set the 10-year lifespan on PPE that we still have today.

The standard went through another complete revision in 2014. This version also added to cleaning and decontamination requirements, as well as PPE repair requirements. Significantly, this edition defined the responsibilities for inspecting, cleaning and repairing PPE garments.

NFPA 1851 2020 edition, our current standard, saw yet more changes to the way gear is inspected, cleaned and repaired. These were significant changes, many adopted to reduce firefighter exposure to carcinogens. That also put more of the onus on fire departments.

On the eve of this version taking effect, Jim Reidy took a deep dive into the changes in his article for Firehouse, “[On the Heels of Change](#).” One of the significant changes was adding on-scene decontamination.

The requirement known as routine cleaning was eliminated and replaced with on-scene wet decontamination, called Preliminary Exposure Reduction, Reidy wrote. “NFPA 1851 will define it as, ‘Techniques for reducing soiling and contamination levels on the exterior of the ensemble or ensemble element following incident operations.’ PER will take the place of Routine Cleaning by mandating it be performed every time PPE is exposed to the product of combustion,” he wrote.

And things like advanced cleaning and advanced inspections were introduced and defined in the 2020

standard. This, again, put more recordkeeping requirements on fire departments. With the next revision of NFPA 1851 in full swing, it is smart to anticipate those recordkeeping requirements will change again.

This, of course, begs the question why does all this NFPA 1851 recordkeeping matter?

On their own, NFPA training standards are not law. There is no Congressional mandate to enforce the standards — the Occupational Safety and Health Administration does have such backing from Congress, for example.

Local and state agencies can adopt the NFPA standards as their own regulations. When this happens, what NFPA standards lack in federal enforcement powers, they gain in state or local authority. That is the case in states like Texas.

Texas abides by 1851 as statutory law, and compliance with the standard is administered by the Texas Commission on Fire Protection, Reidy wrote. In fact, treating the standard as a minimum, Texas departments large and small have been washing gear after every fire for quite some time.

Curt Varone is a fire service legal affairs expert with 35 years as an attorney and nearly 30 years in fire service, retiring as a deputy assistant fire chief. He wrote about this issue in a piece published by [Firehouse Magazine](#).

“The connection between the fire service and the Occupational Safety and Health Administration is a bit strange,” he wrote. “Federal OSHA does not have



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jurisdiction over state and municipal firefighters. States may choose to require compliance with federal OSHA standards. Even then, it is the state, not federal OSHA, that bears responsibility for enforcing the Occupational Safety and Health Act of 1970 requirements for public employees. Nevertheless, OSHA plays an important role in setting minimum health and safety standards for firefighters.”

Varone further cautions that fire departments need to have updated policies that reflect the current standards. Those policies must show that there is an expectation that the highest standards will be met. The idea, he writes, that not having a policy will give departments a way to wiggle out of trouble is antiquated and begging for trouble.

For fire chiefs looking to manage their PPE in a way compliant with NFPA 1851, that means having sound policies in place that spell out what steps must be taken to meet that compliance threshold. The second tier to that

effort is ensuring those efforts are fully documented to show the policy, and subsequently the standard, is being followed.

Matt Shrouts, a solutions engineer with Vector Solutions, says the risk of liability goes way up with inaccurate records. “Nothing puts your agency at more vulnerability than poor documentation,” he says. “If you didn’t document it, it didn’t happen.”

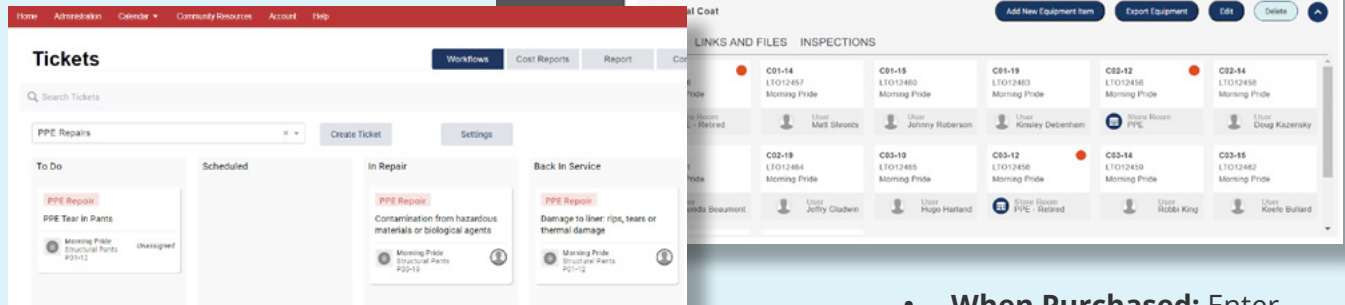
For years we’ve known the important role high-quality PPE plays in keeping firefighters safe in environments that are dangerous to life and health. But as our knowledge of close association with firefighting and deadly illnesses such as cancer and cardiovascular disease grows, so too does our focus on the role PPE plays in our health and wellness.

No one can flawlessly predict the future. Yet, it is safe to assume more financial, legal, and regulatory energy will be directed at firefighter health in the coming years. NFPA 1851 went through substantive changes in 2020, and we should expect more changes — requiring more maintenance and accountability — in the next and subsequent versions of the standard.

Once we take possession of new turnout gear, the real heavy lifting for fire department leaders begins. Making sure policies, procedures and technologies are in place to adapt to those changes will lighten that lift.



How to Track PPE from Cradle to Grave



One of the keys to NFPA 1851 compliance is accurate and complete recordkeeping for every inspection, cleaning and repair work done to each piece of every firefighter's PPE ensemble. That's a tall order.

Vector Solutions' mighty mobile application for inspection checks, Vector Check It, helps firefighters log equipment checks, maintenance and needed repairs. Vector Solutions expanded Vector Check It to follow each piece of PPE from the moment it is delivered brand new until it is retired at the end of its useful life. The company launched the cradle-to-grave PPE Tracker to help agencies meet NFPA standards.

Departments already using Vector Check It will find the PPE Tracker intuitive to use. Vector Check It works whether the department conducts its own PPE inspections, cleanings and repairs, or if it uses an independent service provider. Administrators can run reports during any stage of the process to quickly see the condition of the entire crew's PPE. The application works for departments that provide firefighters one set of turnout gear as well as for those that provide two sets. Here's how Vector Check It help agencies meet NFPA standards by tracking the following PPE information:

- **When Purchased:** Enter the model, ID, serial number, month and year manufactured.
- **When Assigned:** Enter who receives the PPE, the date and condition.
- **When Inspected:** Track routine and advanced inspections, including any abnormalities or needed repairs discovered.
- **When Cleaned:** Track the date and findings of advanced cleaning, disinfection, sanitization and specialized cleaning.
- **When Repaired:** Track the date of repair, who completed it, and a brief description of the work done.
- **When Retired and Disposed:** Track the date of retirement and the method of and reason for disposal.