

Implementing Voluntary Consensus Standards

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Whether you're in safety, human resources, upper management, or anywhere in between, it's a safe bet that you've heard of the [Occupational Safety and Health Administration \(OSHA\)](#). We know that OSHA is "the law" and that anything published by OSHA in the [Federal Register](#) is legally enforceable, regardless of the situation. We also know (or should know) that when OSHA shows up at your doorstep, it is typically not to have coffee and donuts with you (although, that would be a pleasant surprise). So, will simply complying with as many applicable OSHA standards as possible keep you in the clear and away from OSHA citations and hefty penalties? Not always.

As we just mentioned, OSHA's standards are what we must (or as OSHA likes to say, "shall") comply with. However, that does not mean these same OSHA standards will provide the highest or most effective levels of protection for our workers. That's where many industry and voluntary consensus standards come into play, such as those from the [American National Standards Institute \(ANSI\)](#) and the [National Fire Protection Association \(NFPA\)](#). In fact, as of today, there are 67 different ANSI standards and 36 different NFPA standards that have been incorporated by reference by OSHA, meaning they have the same force and effect as OSHA standards and they can cite you for non-compliance with these voluntary consensus standards. Below are a few common ANSI and NFPA standards that have been incorporated by reference (IBR) into various OSHA [general industry](#) and construction industry standards:

- ANSI A90.1-69, *Standard for Manlifts* (IBR for 1910.68)
- ANSI B30.2.0-67, *Safety Code for Overhead and Gantry Cranes*
- ANSI/ISEA Z87.1-2010, *Occupational and Educational Personal Eye and Face Protection Devices*
- NFPA 30-1969, *Flammable and Combustible Liquids Code*
- NFPA 51B-1962, *Standard for Fire Protection in Use of Cutting and Welding Processes*
- NFPA 58-1969, *Standard for the Storage and Handling of Liquefied Petroleum Gases*
- NFPA 101-2009, *Life Safety Code*



But, what if it's not incorporated by reference? What's the benefit of incorporating an NFPA standard into your organization's policies? Although the standards listed above that are incorporated by reference seem outdated (some dating back to the 1960s), they are not the newest version of that particular standard. For example, NFPA 70E®, which is the industry standard for arc flash and electrical safety in the workplace, has been updated every 3 years since 2009. Personally, I've incorporated various NFPA standards, some of which ruffle some feathers, whereas others may be such a minor change that it's barely even noticed. For example, OSHA 1910.252 requires a fire watch for at least 30 minutes after the completion of hot work. However, NFPA 51B's 2019 edition requires a 1-hour fire watch. Will 30 minutes make a big difference in the grand scheme of things? Not typically since many of our customers require a 1-hour fire watch anyways. But what about some of the other areas that may require substantial changes, such as confined space rescue?

Let's just say....

In the famous words of Fire Marshall Bill from the 1990's television series, *In Living Color*, "Let me show you somethin'!" Let's just say that your organization is wanting to start up its own internal/in-house confined space rescue team. How are you going to know that your team is "good enough"? Is OSHA's evaluation criteria found in [29 CFR 1910.146, Appendix F](#) going to suffice? While this is a good starting point, the information contained within Appendix F is (1) non-mandatory and (2) designed primarily for outside rescue services, such as a local fire department. In addition, 1910.146 only says that a rescuer must be able to "respond to a rescue summons in a timely manner, considering the hazard(s) identified" – and that's basically it. Which brings us to the question...what is considered a "timely manner"? Allow NFPA 350, *Guide for Safe Confined Space Entry and Work*, to answer this one for you.



NFPA 350, Chapter 10.1.3.4 provides three tiers (modes) of rescue response:

- **Tier 1** – Applies to confined space work that has no recognized hazards, but could require technical rescue for extrication should a worker become incapacitated
 - Suggests that a fully-trained rescue team is available to **respond within 5 minutes to the site**
 - Capable of setup and rescue entry **within 15 minutes of arrival on-site**
- **Tier 2** – Applies to confined space work that has non-life threatening hazards requiring rapid intervention
 - Suggests that a fully-trained rescue team be **on-site**
 - Capable of setup and rescue entry **within 12-15 minutes of incident occurrence**
- **Tier 3** – Applies to confined space work that has life-threatening hazards requiring immediate intervention
 - Suggests that a fully-trained rescue team be **on-site**
 - Capable of setup and rescue entry **within 2 minutes of incident occurrence**

If you noticed, each of the tiered response modes above mentioned a "fully-trained rescue team". In this same section of NFPA 350, it elaborates and states "*a fully-trained rescue team meeting the requirements of the technician level confined space rescue chapter of NFPA 1670...*". Ahhh...NOW we're getting somewhere! NFPA 1670, Chapter 7.4 outlines some of the minimum requirements for confined space rescue technicians, such as:

- Must be trained, equipped, and available to respond to emergencies within confined spaces
- Must be trained to awareness level for machinery search and rescue
- Must be able to use victim packaging devices suitable for confined spaces with small entry portals

While NFPA 1670 provided some guidance, NFPA 1006, *Standard for Technical Rescue Personnel Professional Qualifications*, is where we hit the jackpot! This standard provides specific, detailed information on requisite skills and knowledge in order to be trained to the technician level. NFPA 1006, Chapter 7.3 provides various job performance requirements (JPRs), including, but not limited to:



- Be able to preplan a confined space incident,

- Apply and use supplied-air respirators (SARs),
- Apply a supplied-air respirator (SAR) to a victim within a confined space,
- Perform short-spine and full spinal immobilization of a victim inside a confined space,
- Be able to operate, calibrate, and bump test air monitoring equipment,
- Be able to perform rescuer pre-entry medical exam,
- Be able to perform a site-specific PPE hazard assessment, and
- Be able to assemble and operate site-specific portable anchor devices and retrieval systems

That's a whole lot more descriptive and informative than OSHA's generic information found in 1910.146, isn't it? While I understand that this may mean that your in-house confined space rescue team isn't "good enough", it may allow you to re-evaluate the situation and determine what the best approach is moving forward. During an actual confined space rescue situation is **NOT** the ideal time to be finding out that your in-house rescue team hasn't been sufficiently trained in order to safely rescue the victim, which could end up in some serious OSHA citations and penalties, but more importantly, could result in the fatality of one (or more) of your coworkers. On the other hand, it may give you something to strive towards in order to show your dedication to protecting your workers.

Summary

Ultimately, the decision is up to you, but by at least reviewing applicable voluntary consensus standards during your decision-making process, you will be able to make a more competent decision and be able to sleep better at night knowing that you evaluated more feasible options, rather than just OSHA's (often outdated) one. Whenever I teach a class, such as confined space entry or rescue, hot work, or fall protection, I always teach both standards – what OSHA says, as well as what the voluntary consensus standard says (e.g., NFPA, ANSI, etc.) – so that they can be made aware of the differences and be able to make a more informed decision on that particular topic. Some voluntary consensus standards are completely free for online viewing (such as NFPA's digital standards), whereas others, like ANSI/ASSP, require you to purchase many of their standards before viewing them.

If you have any questions about how Arrow Safety can help your employees stay safe and keep your business headed in the right direction, contact us and we'll be glad to help! We travel nationwide and all new customers get **10% off!**



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