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Monday Minute

January 10, 2022

Permit Required Confined Spaces

Non-Entry vs. Entry Rescue

What is a Confined Space?

OSHA defines a Confined Space as any space that:

- Is large enough to bodily enter and work
- Has limited means of entry and exit
- Is not designed for continous occupancy

DID YOU KNOW?

OSHA has very specific requirements as related to confined space rescue. Rescuers must be trained and demonstrate proficiency in:

- Confined Space rescue procedures, techniques, and equipment
- CPR and First Aid
- Documented simulated training exercises using actual confined spaces and life-size manikins or people
- Ability to reach victims within an acceptable time frame depending on the hazards

Safe Workforce Development's professional Confined Space Rescue Team consists of professional fire fighters and EMTs that have received multiple specialized trainings that may include technical rope rescue, confined space rescue training and/or Hazmat. They understand the unique challenges of confined spaces and are adept at being able to provide emergency rescue within seconds of an incident occuring.

60% of confined space related deaths are would-be rescuers

When Do You Need a Rescue Team?

Working inside of a confined space is one of the most hazardous jobs that an employee can perform. Not only are the normal industry hazards present, but there could also be the possibility for potential explosive atmospheres, oxygen deficient or enriched environments, engulfment, and entrapment.

With the potential for these hazards being extremely high, the question of whether or not to use a professional rescue team comes up. To answer that question, we first have to understand the difference between non-entry, and entry rescue.

Non-entry rescue is the ability to retrieve the entrant from the confined space without any other personnel entering the space. This is usually accomplished with a lifeline attached the the entrant's harness. In the case of vertical entries, equipment such a tripod and winch, or 4 to 1 rope retrieval system may be used. Employees can usually be trained in non-entry rescue over the course of a day. Additionally, the space itself is configured so that there are no obstructions to retrieval; in other words, the entrant can be pulled directly out of the confined space.

Entry rescue is much more specialized and is for when the entrant can't be retrieved without other personnel entering the space. This can be due to the configuration of the space, whether or not the entrant has to come off of the lifeline, or if the environment is considered immediately dangerous to life or health (IDLH; for example, atmoshpheres that have become so toxic that even brief exposure is life threatening).

Now that we know the difference in the two main types of rescue, we need to discuss OSHA and the National Fire Protection Assoication (NFPA) - the two governing organizations around confined space entry and rescue.

OSHA (Federal Law) states that rescuers must be proficient at the skills and use of confined space rescue equipment, be CPR/First Aid certified, **AND** be able to reach the victims in a time frame that is appropriate for the confined space hazards identified. See 29 CFR 1910.146(k)(1)(iii)(A) if you're curious.

OSHA tells you what to do.
The NFPA tells you how to do it.

For simple, non-entry rescue scenarios, your employees might meet these requirements and be sufficient. Or, it might sound like the local fire department is a perfect fit.

However, this is where we have to put down the OSHA standards, and switch over to the NFPA guidelines. OSHA tells you what you must do, which is respond to an emergency within an appropriate time frame. However, the NFPA tells you what those time frames are.

SAFE WORKFORCE DEVELOPMENT

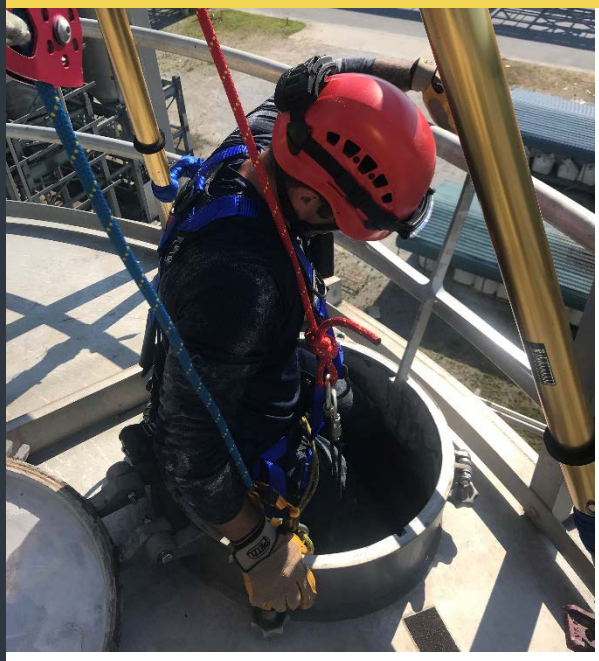
The NFPA Confined Space Rescue Tiers

-NFPA 350

Tier 1 – Contains no recognized hazards (OSHA non-permit required confined space), but could require technical rescue should a worker become incapacitated. Rescue is available to **respond within five minutes** to the site and is capable of setup and rescue **entry within 15 minutes.**

Tier 2 – Contains non-life-threatening hazards (OSHA permit required confined space) that would require rapid intervention. The **rescue crew is on site,** and equipped for safe entry and rescue. The rescue team is capable of **setup and rescue entry within 12 to 15 minutes of incident.**

Tier 3 – Life-threatening hazards exists (OSHA permit required confined space) which would require immediate intervention. Actual or potential IDLH conditions exist. The rescue team is **fully setup and capable of rescue entry within two minutes of incident**. The rescue team should be dedicated to this singular entry with no other responsibilities.



Is the local fire department sufficient?

We asked local fire chiefs if their stations and crews were trained and equipped for confined space rescue.

The NFPA has designated confined space rescue into different response tiers based on the space's hazard levels. To determine if your are responding "in an appropriate time frame," you need to complete a hazard assesment of the confined space, and the work to be done.

Well, if you're banking on your local fire department to be your confined space rescue team, I've got bad news. Unless 100% of your confined space entries are what OSHA deems non-permit required, the fire department is most likely not capable or equipped to be able to respond within the required time frames.

When asked, one local fire chief told us, "Confined space rescue presents a unique set of challenges that not all of our fire fighters are trained for, and unfortunately not all of our stations are equipped to handle." He went on to say that by relying on them, you are delaying rescue. Once they arrive, even if they are trained and equipped to handle the rescue they still have to complete an entry permit, ensure LOTO for their team, monitor the air for hazards, ventilate the space, create a rescue plan, set up the rigging and retrieval equipment, and only then can they make entry and begin the rescue.

"Only 34% of fire departments in the U.S. have the ability and capability to provide technical/rescue services."

(US Fire Administration)

Is this list of tasks acheivable in 12 to 15 minutes? No.

It's almost impossible to be compliant with the NFPA guidelines, thereby ensuring OSHA compliance by relying on the local fire department.

To meet the industry standards, and more importantly, to ensure the safety and well being of your team, a dedicated, professional on-site rescue team is a must. Anything else is an attempt to check a box.

Are Your Employees Prepared?

Every year, over 2 million workers enter confined spaces!

Safe Workforce offers a unique, hands-on training experience for confined space entry, as well as non-entry rescue.

Our classes not only teach the "how and why" of following safe confined space procedures, they also allow attendees to get hands on experience.

Your employees will apply their knowledge and practice real entry scenarios in our training tank, including: non-entry rescue set up and retrieval, atmospheric monitoring and ventilation set up, air change per hour calculations, and simulated emergency rescue!

Contact Safe Workforce today to discuss the unique situations of your confined space entry process