## Propane Safety 1910.110(f)(1)

How well does your facility handle propane cylinders? Has an inspection of propane storage been conducted? Does your facility assume everyone understands propane safety since it is a somewhat common gas that employees have experience with? Most of us have propane cylinders at home on our barbeque grills. So why do I need extra training and understanding here at work? As a trainer you are already fighting a battle with that employee. You break into that barrier where the employee thinks he knows how to be safe around propane. Propane is very flammable and can cause freeze burns when it comes into contact with skin. I have walked into warehouses over the years where there are 25 forklifts in action at one time. I would observe their hands and arms and look for burn marks. I knew right away what kind of training/compliance was going at the facility. Storage areas are also an issue. Cylinders where setting around the cage and not secured. The relief valve was not in the 12 o'clock storage position. No smoking signs were not present as well as a flammable sign.

Below are some excerpts from the regulation:

Application. This paragraph shall apply to the storage of portable containers not in excess of 1,000 pounds water capacity, filled or partially filled, at user location but not connected for use, or in storage for resale by dealers or resellers. This paragraph shall not apply to containers stored at charging plants or at plants devoted primarily to the storage and distribution of LP-Gas or other petroleum products.

Containers when stored inside shall not be located near exits, stairways, or in areas normally used or intended for the safe exit of people. The best practice is to have them stored at least 20 feet away from the building in an open air caged environment with a protective roof overhead (rain and sun).

Empty containers which have been in LP-Gas service when stored inside, shall be considered as full containers for the purpose of determining the maximum quantity of LP-Gas permitted by this paragraph.

The quantity of LP-Gas stored shall not exceed 300 pounds (approximately 2,550 cubic feet in vapor form) except as provided in subparagraph (5) of this paragraph.

The quantity of LP-Gas stored in special buildings or rooms shall not exceed 10,000 pounds.

Fire protection. Storage locations other than supply depots separated and located apart from dealer, reseller, or user establishments shall be provided with at least one approved portable fire extinguisher having a minimum rating of 8-B, C.

Containers shall be in a suitable enclosure or otherwise protected against tampering.

Forklift Cylinders can be used/stored either vertically or horizontally but when horizontal, the relief device must be located at the 12 o'clock position.

Always wear appropriate gloves and other PPE when connecting and disconnecting propane cylinders from their hoses – Propane can cause freezer burn instantaneously.

Cylinders must be protected from falling by using a chain or another adequate support system.

Propane cylinders must be upright and secured during transport.

There are many more rules and regulations concerning propane storage and use that you need to be familiar with. You may not be an expert in this area but take a snapshot of your propane use and storage. Look through the regulations and see if your facility has any gaps that can be corrected. Talk to your employees and see what their propane knowledge is. Prevent propane incidents together.