



SAFETY ALERT # 9



Week of January 3rd, 2006

In the interest of keeping everyone safe CAMSAFETY will be sharing injury information with preliminary root cause analysis. This information is intended to make you think not assess blame. If you have an incident that you would like to share send us the information and we will pass it along.

What Happened

A gang box belonging to one of several contractors on a site was being used to store B sized Acetylene tanks. One of the tanks was leaking and acetylene gas was allowed to accumulate in the gang box for over an hour. Employees from a different contractor were silver soldering close by when the open flame caused the accumulated gas in the gang box to explode, injuring two workers, one seriously.

Applicable Standards

Part 7 Rule 722 (2) “A cylinder shall be stored away from any source of heat in excess of 125 degrees Fahrenheit”

Part 7 Rule 722 (7) “A storage area for cylinders shall be well ventilated”

Part 7 Rule 722 (8) “A cylinder shall not be stored in basements or pits” (the gang box amounted to a pit)

Part 7 Rule 722 (9) “All storage of fuel gas or oxygen within a building shall be in accordance with the specifications of National Fire Protection Association Standard, NFPA 58...”

1910.1200 (h)(1) “Employers shall provide employees with effective information and training on hazardous chemicals in their work area...”

Recommendations

- Do not store cylinders in an un-ventilated locker such as a gang box or other un-ventilated area
- Always use acetylene in a well-ventilated area.
- When in doubt conduct air sampling, *the nose doesn't know*.
- NEVER take, store or use acetylene cylinders in a confined space.
- Always remove regulators, replace safety caps, and secure cylinders from falling over when storing or transporting.
- Always inspect regulators and hoses prior to use.
- Always use reverse flow check valves and flame arrestors.
- Never store cylinders near open flames or electrical equipment.
- If you use compressed gas cylinders become familiar with the provisions of MIOSHA part 7.

Additional Issue

This tragic incident could have been much worse. An exploding acetylene tank is a bomb pure and simple. We did not discuss the multi-employer work site issues also involved with this incident.

Whenever you are working on a site with multiple contractors make sure you know what the other guy is up to. In this incident the injured workers undoubtedly had no idea that the tanks were there but they sure suffered the consequences.

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