Worker Dies in Long Haul Tanker Trailer



INCIDENT

He entered the trailer on his own power. Garcia was found without a respirator, a safety harness and any protective clothing. He died soon after he was pulled from the tank, asphyxiated by the Alpha-Pinene 99.2 percent vapors inside the tanker truck, according to the OSHA investigation summary. Alpha-Pinene is a pine tree solvent used to give bathroom cleansers a fresh, “piney” smell.

Garcia was still alive when he was pulled from the truck, but died shortly after in hospital. The OSHA investigation summary lists asphyxiation as the cause of death.

No one knows how long Garcia was inside the truck, but it was probably a matter of minutes before he was found. What happened next likely qualifies as a near-miss confined space fatality.

“A guy jumped in the truck without a respirator or a harness and pulled him out,” a company source said. Fortunately, the pine solvent did not overcome the rescuer.

This part of the Garcia case illustrates one reason why multiple fatality confined space incidents often occur. Even if they have been properly trained, workers may forget their training and the proper entry procedures, and jump into the confined space without PPE because they are overcome by the natural emotion to rescue a co-worker. All too often, the would-be rescuer is overcome by the same hazard that knocked out the person he was trying to rescue.

NEED TO KNOW

Ricardo Garcia a Mexican national was working in Laredo Texas one day in March 2000 as a contract employee. He decided to clean the inside of a long-haul, 7,000-gallon tanker trailer.

BUSINESS / REGULATIONS

We can see Regulatory, Business and Family intercepts in the sad narrative of Ricardo Garcia. OSHA in 1993 issued its confined space regulation 29 C.F.R. 1910.146. but in 2000 OSHA investigated 28 cases of confined space fatalities. One of those cases was Ricardo Garcia.

Training

The heart of the matter appears to be whether the owner of the confined space, Reynolds Nationwide, had trained Garcia in permit-required confined space entry, as OSHA regulations require. Reynolds is a trucking company with operations in Laredo, Texas.

Experts and OSHA investigators say inadequate training in permit-required confined space programs is frequently a contributing factor in fatal incidents.

Training failures are often the cause of confined space fatalities. They gave him a job to do, one that involved cleaning a confined space, but they did not make it clear he shouldn't go in.

Contract workers

Training and disciplining contract workers in confined space programs can pose challenges for employers, but the Garcia case illustrates that, as far as OSHA is concerned, employers are just as responsible for the safety of contract workers as they are for their regular employees.

Reynolds owned the trailer and contracted with Estrella to clean it.

"The Mexican company billed Reynolds for Garcia's time; it's like he was leased to them," said OSHA after the citations were issued.

Reynolds maintains it had a written permit-required confined space program, but OSHA cited the firm for failure to comply with this part of the rule. On the day OSHA arrived to investigate, the manager of Reynolds on duty "couldn't find the written program."

"The fact that employees could go into a permit-required confined space was not recognized or addressed by the employer," according to OSHA. "If you've got a permit-required confined space, you must either look at the possibility an employee will enter or make sure they can't get in."

Employee misconduct

Reynolds says there was employee misconduct. But OSHA cited Reynolds for failure to comply with the training component of the regulations.

The "employee misconduct defense" is frequently used by employers in confined space cases, but it is valid only if employers can prove:

- They provided the equipment;
- Established a work rule or policy;
- Communicated it effectively to employees;
- There is an enforcement procedure;
- The misconduct is an isolated incident; and
- The worker completed the training.

This admittedly is a high bar for any company to prove.

The victim's family is suing the owner of the space. In its original petition, the family seeks unspecified monetary damages and alleges three negligent acts or omissions by Reynolds.

The family also alleges failure to provide the plaintiff with a reasonably safe place to work, breathing safety gear and safety clothing. The petition also states that Garcia was the sole financial support of his parents.

STATISTICS

About 2.1 million workers enter permit confined spaces annually. According to the National Institute for Occupational Safety and Health (NIOSH), approximately 60 percent of confined-space fatalities are rescuers, and the Occupational Safety and Health Administration reported that when multiple deaths occur during a rescue, the majority of the victims are “would-be” rescuers.

Here are some findings of the NIOSH investigations of confined space incidents:

- 85% of the time a SUPERVISOR was present.
- 29% of the dead were SUPERVISORS.
- 31% had WRITTEN Confined Space Entry PROCEDURES.
- 0% used the WRITTEN PROCEDURES.
- 15% had Confined Space TRAINING.
- 0% had a RESCUE PLAN.
- 60% of “WOULD-BE” RESCUERS died.
- 95% were AUTHORIZED by supervision.
- 0% of the spaces were TESTED prior to entry.
- 0% were VENTILATED.

Out of 100 deaths that were investigated, the main reasons the workers entered the confined space were to perform their work functions of routine maintenance, repairs, and inspections of the confined space.

Out of 670 confined space deaths, the most common types of hazards were atmospheric hazards and loose materials.

And out of 217 confined space deaths that were investigated, the two most common types of gases in confined were spaces, hydrogen sulfide and carbon monoxide.

PREVENTION

The object or goal of prevention is to mitigate and eliminate the risk of confined space injuries and fatalities.

Every worker has the legal right to ensure his or her safety.

Question.

What should a worker do before enter a confined space?

The worker should determine if that work space is considered a confined space. Be sure the confined space hazard assessment and control program has been followed.

The next question to ask is – Is it absolutely necessary that the work be carried out inside the confined space? In many cases where there have been deaths in confined spaces, the work could have been done outside the confined space!

Before entering any confined space, a trained and experienced person should

identify and evaluate all the existing and potential hazards within the confined space. Evaluate activities both inside and outside the confined space.

Air quality testing: The air within the confined space should be tested from outside of the confined space before entry into the confined space. Care should be taken to ensure that air is tested throughout the confined space – side-to-side and top to bottom. Continuous monitoring should be considered in situations where a worker is in a space where atmospheric conditions have the potential to change (e.g., broken or leaking pipes or vessels, work activities create a hazardous environment, isolation of a substance is not possible). A trained worker using detection equipment which has remote probes and sampling lines should do the air quality testing. Always ensure the testing equipment is properly calibrated and maintained. The sampling should show that:

- The oxygen content is within safe limits – not too little and not too much.
- A hazardous atmosphere (toxic gases, flammable atmosphere) is not present.
- Ventilation equipment is operating properly.

Question.

What are the means to control hazards in confined space?

The traditional hazard control methods found in regular worksites can be effective in a confined space. These include engineering controls, administrative controls and personal protective equipment. Engineering controls are designed to remove the hazard while administrative controls and personal protective equipment try to minimize the contact with the hazard.

However, often because of the nature of the confined space and depending on the hazard, special precautions not normally required in a regular worksite may also need to be taken. The engineering control commonly used in confined spaces is mechanical ventilation. The Entry Permit system is an example of an administrative control used in confined spaces. Personal protective equipment (respirators, gloves, ear plugs) is commonly used in confined spaces as well. However, wearing of PPE sometimes may increase heat and loss of mobility. Those situations should be carefully evaluated. When using PPE be sure to evaluate all possible hazards and risks associated with PPE use.

“An ounce of prevention fetches a pound of cure.” A scrupulous approach to dealing with confined space permit issues is the best way to try to minimize, mitigate and possibly eliminate problems.