

SAFETY MEMO

February 15th, 2021 – Confined Space Entry



Incident

Laporte provides employees with information on industry incidents to further knowledge of Occupational Health and Safety (OH&S). This memo is provided as a case study of an incident and to highlight industry hazard awareness.

Description

Confined Space refers to any space that an employee can bodily enter and performed assigned work. The person entering the space has limited or restricted means for entry and exit (for example, tanks, vessels, silos, etc.). These spaces are not designed for continuous employee occupancy.

Hazards associated with confined spaces include but are not limited to:

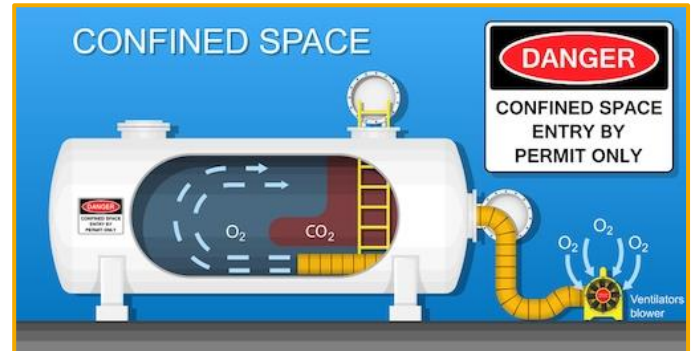
- A toxic atmosphere due to the presence or ingress of hazardous substances.
- Oxygen deficiency due the displacement of air by another gas.
- Flammable or explosive atmospheres due to the suspension of combustible dust.

Incident

A 23-year old mechanic died of asphyxiation after entering a permit-required confined space.

The company had a confined space entry policy stating that individuals were not permitted to enter the tank until the permit was checked and documented. The tank was purged with inert nitrogen and marked that it was safe to enter using proper tank entry. The mechanic entered the tank via manhole and soon suffocated. Approximately one-hour later the victim was found and could not be resuscitated.

After an OSHA investigation, it was found that the policy originally written for confined space entry was not always carried out.



Human Factor Issues

- The confined space entry procedure was not consistently carried out.
- The documentation posted on the tank after it was purged was never verified.
- The atmosphere of the tank was not checked prior to entry.
- A designated watch person was not assigned to assist from outside the confined space entry door.

Prevention

Permit-required confined spaces must require completed, written procedures. This procedure should instruct employers to:

- Provide documentation of test results by an authorized person.
- Evaluate hazardous conditions and post warning signs at entry.
- Gain training in proper entry procedures.
- Implement measures to prevent unauthorized entry.
- Use forced air-ventilation while entering.
- Monitor the atmosphere constantly.
- Assist those entering the confined space.
- Provide procedures for safe rescue of an employee entering the confined space, should it be required.

