



CIRSA HAZARD ALERT

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SAFER TOGETHER

Hazard Alert - Best Practices for Permit-Required Confined Spaces



Entering permit-required confined spaces is one of the most hazardous tasks for public employees, making it essential to closely follow all safety protocols. This Hazard Alert discusses characteristics of confined space hazards and discusses best practices for operations in confined spaces. As part of your entity's ongoing risk management and safety efforts, you will want to review your confined space entry program regularly to ensure compliance with safety regulations and procedures and will want to provide regular training to employees.

Definition of a Confined Space:

A confined space is an area that:

- Is large enough and configured to allow an employee to enter and perform work.
- Has limited or restricted means of entry or exit.
- Is not designed for continuous occupancy.

A **permit-required confined space** includes all the above characteristics, plus one or more of the following:

- Contains or has the potential to contain a hazardous atmosphere.
- Contains a material that could engulf an entrant.
- Has an internal configuration that could trap or asphyxiate an entrant, such as inwardly converging walls or a floor that slopes downward to a narrow cross-section.
- Contains other recognized serious safety or health hazards (Heat, Noise, Chemicals, Moving Objects)

Common examples of confined spaces include tanks, vessels, silos, storage bins, hoppers, vaults, pits, manholes, tunnels, equipment housings, and ductwork.

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Best Practices for Permit-Required Confined Spaces (cont.)

Written Program:

Municipalities and other entities whose operations include work in these spaces should maintain a written, up-to-date program for permit-required confined spaces, which should include:

- A list of authorized entrants and attendants.
- The names of entry supervisors and their contact information.
- Training information and rescue procedures.
- A list of known permit-required confined spaces that employees may enter.
- Detailed procedures and conditions for safe entry into these spaces.

CIRSA provides a model Confined Space Written Program that can be customized to suit your organization's needs. For a copy, contact your CIRSA Risk Control Representative.

Confined Space Entry Permit:

Before authorizing entry, employers should complete an entry permit that documents the necessary safety measures. The entry supervisor, identified on the permit, must sign it to authorize entry. The completed permit should be available at the entry point or another readily apparent and accessible location so entrants can verify that all pre-entry preparations are complete. The permit's duration should be limited to the time required to complete the specific task or job identified on the permit.

Training:

Employees involved in permit-required confined space entry must undergo training to gain the necessary knowledge, skills, and understanding to perform their duties safely. This training should cover the necessary roles of attendant, entrant, and supervisor. Practical, hands-on training is available upon request through the CIRSA Risk Control Department. Additionally, rescue teams should conduct a practice rescue at least once a year to maintain proficiency.

Equipment:

Equipment used for confined space entry may include gas detection meters, ventilation blowers and non-entry rescue equipment. Non-entry rescue equipment can include Tripods, Davit arms, as well as a retrieval winch rated for the hazards associated with the work being conducted. Harnesses, hard hats, and other personal protective equipment (PPE) may be required. All equipment should be maintained according to the manufacturer's recommendations, including regular inspections, calibration, and meter zeroing. Always refer to the equipment manuals for specific inspection criteria and frequency.

Rescue Operations:

Rescue operations for confined spaces can include any one or more of the following:

- Self-rescue.
- Non-entry rescue.
- Use of an in-house rescue team.
- Assistance from an external rescue team, such as a contracted service, local fire department, or county tactical rescue team.

When using an external rescue team, you'll want to consult closely with them to determine if they are properly trained

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and equipped for those types of permit-required confined space rescues that might be necessitated by your entity's operations. Many local fire departments and other rescue teams are equipped and trained to conduct certain types of rescues but may not be prepared specifically for permit-required confined space rescues.

These best practices are vital for maintaining safety and compliance in permit-required confined spaces, helping to protect employees and ensure safe operations.

Sources

www.osha.gov/confined-spaces