

Introduction

A situation requiring confined space entry can be encountered in many industrial operations. Authorized entry should require a pre-entry checklist to ensure rescue team members enter safely. The need for a confined space emergency rescue can be the result of earthquakes, construction or support failures, or any incident that results in a narrow and constricted entry, preventing easy access by rescuers.

A confined space pre-entry checklist should be completed prior to entering any confined space. A pre-entry checklist may include the following:

<http://www.emergency-response-planning.com/blog/bid/41801/The-Top-10-Checklist-Items-for-Confined-Space-Entry>

1. Discuss prior to entry:

- Scope of work to be done inside confined space
- Knowledge of current contents of the confined space
- Preparation that has been completed, including removal and clean up of chemicals from the confined space
- Completed hazard identification and risk assessment
- All aspects of safety measures
- Name of entrants, attendants, supervisors and rescue team

2. Permit

- Confined space entry permit has been issued.
- The confined space permit is up to date.
- If hot work will be carried out, ensure hot work permit is attained

3. Verification of conditions

- All instruments used are calibrated.
- The person in charge for atmospheric testing is qualified and competent.
- The confined space has been tested for atmospheric conditions.

4. Testing Results

- Determine Oxygen content levels
- Are toxic, flammable or vapor gases present?
- Evaluation and confirmation of atmospheric testing.

5. Monitoring

- Make sure the confined space atmosphere will be monitored while work is in progress.
- Prepare a monitoring time table.

6. Ventilation

- Identify ventilation considerations before entry and throughout duration of rescue.
- Ensure air intake (supply) for the ventilation system remains unobstructed
- If the atmospheric conditions are unacceptable, ventilate and retest space.

7. Isolation

- The confined space has been isolated from other systems.
- Mechanical equipment has been blocked, chocked and disengaged.
- Tags and blind plates have been installed at appropriate block valves.

8. Equipment, Personal Protective Equipment

- Special equipment/tools have been provided.
- Special clothing required for the work inside confined space has been provided (chemical suit, boots, safety shoes, goggles).
- Lighting requirements have been fulfilled.

9. Training

- The entrants, attendants, supervisors and rescue teams have attained confined space entry training.

10. Standby/Rescue Team

- There is a team or rescue member outside of the confined space in constant communication with the personnel inside the confined space.

NFPA: Confined Space

Confined space rescue is covered under the National Fire Protection Association (NFPA) 1670, and under numerous OSHA's standards. OSHA uses the term "permit-required confined space" to describe a space that has one or more of the following characteristics:

- potential to contain a hazardous atmosphere
- contains a material that has the potential to engulf an entrant
- has walls that converge inward or floors that slope downward and taper into a smaller area which could trap or asphyxiate an entrant
- contains any other recognized safety or health hazard, such as unguarded machinery, exposed live wires, or heat stress.

