

Confined Space "Definition/Recognition"



The qualified person who directs the confined space operation should be designated by the employer, in writing, as capable (by education and/or specialized training) of anticipating, recognizing and evaluating employee exposure to hazardous substances or other unsafe conditions in a confined space.

The qualified person should:

- Be able to define a confined space;
- Have knowledge of testing procedures and testing equipment;
- Be familiar with the physical characteristics, configuration, and location of a confined space;
- Know what to look for in a confined space worksite (e.g., existing and potential hazards, such as oxygen deficiency, flammable/explosive atmospheres, toxic atmospheres, etc.);
- Know how to administer a confined space entry permit;
- Be familiar with ventilation system design and installation;
- Take responsibility for supervision of the confined space program;
- Schedule stand-by personnel when personnel enter a confined space area;
- Have appropriate knowledge of steps to take concerning energy sources that are potentially hazardous and should be locked out, disconnected, relieved and/or restrained before any entry into confined spaces.

Management is responsible for determining the qualification of the person who will be designated as the qualified person.

Here's what confined spaces are in the construction industry:

Configurations such as tanks, vessels, silos, vaults, pits, shafts, pipelines, ducts, sewers, manholes, tunnels which:

- 1) may have limited means of egress
- 2) are not designed for continuous employee occupancy, and
- 3) one or more of the following characteristics may have a hazardous atmospheric conditions (improper oxygen levels, combustible atmospheric condition, or toxic atmospheric conditions)

Here's an outline of where to begin, how to accomplish a confined space policy, and who is accountable:

Planning sessions by qualified personnel:

- Schedule of jobsites where confined space conditions exist;
- Work to be accomplished;
- Designated personnel;
- Hazard assessment;

Testing of atmosphere:

- Cleaning/purging/ventilating;
- Study of worksite conditions;

Ventilation:

- Drawing air out of space,
- Blowing clean air into space;
- Using only explosion proof equipment;
- Retesting of air before entry;

Training personnel:

- Emergency entry/exit procedures;
- Use of proper respirators;
- First-Aid/CPR;
- Rescue training/drills;

Lockout/Tagout:

- Check existing electrical equipment;
- Posting jobsites where entry is prohibited by non-qualified personnel;

Standby personnel/communications:

- Buddy system;
- Hand held radios;

Tools and equipment:

- Approved electrical equipment only;
- Proper safety lines/lighting;

Entry permits:

- Company adopted entry permitting processes;
- Notification procedures;
- Who approves;

Continuous monitoring of atmosphere:

- Who monitors;
- Type of equipment to be used;
- Who gives “all clear”;

Record keeping

- Training;
- Safety drills;
- Inspection of equipment;
- Test results of atmosphere.

In some areas, Federal, state or regional safety agencies have adopted systems whereby the contractor responsible for a confined space jobsite must pursue an entry permit process.

A survey should be conducted on all jobsites to identify confined space conditions. Hazards should be identified for each confined space. A review of the conditions should center on:

- Physical characteristic, configuration, and location of the confined space;
- Existing and potential hazards, such as oxygen deficiency, flammable/explosive atmospheres,

- and toxic atmospheres;
- Mechanical hazards;
Based on the evaluation of the hazards, a qualified person should classify the confined space as a permit required confined space (PRCS) or a non-permit confined space (NPCS).

If a permit is deemed necessary, it would require the following data:

- Date of entry;
- Location of entry;
- Type of work to be performed in the confined space area;
- Hazards to be controlled or eliminated prior to entry;
- Safety equipment required;
- Safety precautions required on the job;
- Type of atmospheric tests and the results of those tests;
- Type of rescue equipment that will be needed;
- Duration of the permit;
- Space for approval authority.

In a confined space operation, control is centered around one individual whether it be the company safety director, the superintendent, a competent person, or some other employee. The company safety policy should clearly identify this individual. The Entry Supervisor is the Captain of the ship (the confined space).