

Confined Space Atmospheric Controls

The main hazard of permit-required confined spaces is atmospheric dangers. Because of this, atmospheric control measures are necessary to protect the entrants. These controls will be chosen based on the hazards present in the space and the type of work being done in the space.

Inerting

One atmospheric control which is used is called “inerting.” Inerting helps control the potential for explosion or fire by displacing fuel and oxygen with nonflammable gas. Common inerting agents are nitrogen, argon and carbon dioxide.

Purging or Ventilating

While inerting agents are useful for preventing fire or explosion, they are all asphyxiants and are colorless and odorless. This means that they can keep you from breathing properly—even to the point of death—and that you can’t detect them on your own until it is too late. Because of this, **either “purging” or “ventilation” must follow inerting to return the atmosphere to breathing quality.** Purging means adding breathing-quality air to the space. Ventilating is similar to purging in that breathing-quality air is added to the space, but contaminated air is also removed.

Atmospheric controls are individual to the space being worked in and are always included in preparation for entry.