

**WAC 296-809-099 Definitions. Acceptable entry conditions.** The conditions that must exist in a permit-required confined space to allow safe entry and work.

**Alternative methods.** Permit-required confined space using alternative methods. An alternative process for entering a permit space under very specific conditions outlined in WAC 296-809-60002 and 296-809-60004. The employer must complete documentation as required to communicate to the workers the space conditions. For an example, see Appendix J Alternative Method Documentation by visiting the labor and industries website at <http://www.lni.wa.gov/safety/rules/chapter/809/>.

**Atmospheric hazard.** See definition of hazardous atmosphere.

**Atmospheric testing.** See definition of monitoring or testing.

**Attendant.** An individual stationed outside one or more permit-required confined spaces to monitor the entrants. Attendants must perform the duties required in WAC 296-809-50020.

**Barrier.** A physical obstruction that blocks or limits access.

**Blanking or blinding.** The absolute closure of a pipe, line, or duct by fastening a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore. It is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

**Calibration.** Checking a direct reading instrument against an accurate standard such as a calibration gas to determine deviation and correct for analytical errors.

**Competent person.** A person capable of identifying existing and predictable hazards in the surroundings or working conditions including those that are unsanitary, hazardous, or dangerous to employees, and has the authorization to take prompt corrective measures to eliminate them. They must be knowledgeable in this chapter.

**Confined space.** A space that is **all** of the following:

(a) Large enough and arranged so an employee could fully enter the space and work.

(b) Has limited or restricted entry or exit. Examples of spaces with limited or restricted entry are tanks, vessels, silos, storage bins, hoppers, vaults, excavations, and pits.

(c) Not primarily designed for continuous human occupancy.

**Note:** See Appendix A Frequently Asked Questions and Examples of Confined Spaces by visiting the labor and industries website at <http://www.lni.wa.gov/safety/rules/chapter/809/>.

**Control.** The action taken to reduce the level of any hazard inside a confined space using engineering methods (for example, ventilation), and then using these methods effectively to maintain the reduced hazard level. Control also refers to the engineering methods used for this purpose. Personal protective equipment is not a control.

**Controlling contractor (employer).** The employer that has overall responsibility for construction at the worksite. If the controlling contractor (employer) owns or manages the property, then it is both a controlling employer and a host employer.

**Double block and bleed.** The closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves. See also chapter 296-803 WAC, Lockout/tagout (control of hazardous energy) <http://www.lni.wa.gov/safety/rules/chapter/803/>.

**Early-warning system.** The method used to alert authorized entrants and attendants that an engulfment hazard may be developing. Examples of early-warning systems include: Alarms activated by remote sensors; and lookouts with equipment for immediately communicating with the authorized entrants and attendants.

**Emergency.** Any occurrence (including any failure of power, hazard control or monitoring equipment) or event internal or external to the permit-required confined space that could endanger authorized entrants.

**Energy-isolating device.** A mechanical device that physically prevents transmitting or releasing energy. This includes, but is not limited to:

- Manually operated electrical circuit breakers.
- Disconnect switches.
- Manually operated switches that disconnect the conductors of a circuit from all ungrounded supply conductors if no pole of the switch can be operated independently.
- Line valves.
- Blocks.
- Similar devices.

**Note:** Push buttons, selector switches and other control circuit-type devices are not energy isolating devices.

**Engulfment.** The surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be inhaled to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

**Enter (entry).** The action where any part of a person's body breaks the plane (passes through an opening) into a confined space. Entry occurs as soon as any part of the entrant's body breaks the plane of the opening into the space whether or not such action is intentional or any work activities are actually performed in the space.

**Note:** When the opening is large enough for the worker to fully enter the space, a permit is required even for partial body entry. Permits are not required for partial body entry, where the opening is not large enough for full entry, although other rules such as chapter 296-803 WAC, Lockout/tagout (control of hazardous energy), and chapter 296-841 WAC, Airborne contaminants, may apply.

**Entrant.** An employee who is authorized by the employer to enter a permit-required confined space.

**Entry employer.** Any employer who has an employee enter a permit space.

**Note:** An employer cannot avoid the duties of the standard merely by refusing to decide whether its employees will enter a permit space. DOSH considers the failure to decide as an implicit decision to allow employees to enter those spaces, if they are working in the proximity of the space without the required worker protections.

**Entry permit (permit).** The written or printed document that is provided by you to allow and control entry into a permit-required confined space and that contains the information required in WAC 296-809-500 Permit entry procedures.

**Entry rescue.** Occurs when a rescue service enters a permit space to rescue one or more employees.

**Entry supervisor.** The qualified and trained person (such as the employer, crew leader, or crew chief) responsible for identifying permit-required confined spaces and performing responsibilities and job duties as outlined by WAC 296-809-50018. For example:

- (a) Determining if acceptable entry conditions are present at a permit-required confined space where entry is planned;
- (b) Authorizing entry and overseeing entry operations; and
- (c) Terminating entry as required by this standard.

**Note:** An entry supervisor also may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required by this standard for each role he or she fills. The duties of entry supervisor may be passed from one individual to another during the course of an entry operation.

**Hazard.** A physical hazard or hazardous atmosphere. See definitions below.

**Hazardous atmosphere.** An atmosphere that may expose employees to the risk of death, incapacitation, impair their ability to self-rescue

(escape unaided from a permit-required confined space), injury, or acute illness caused by one or more of the following:

(a) Flammable gas, vapor, or mist in excess of ten percent of its lower flammable limit (LFL) or lower explosive limit (LEL).

(b) Airborne combustible dust at a concentration that meets or exceeds its LFL. The concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52 m) or less.

(c) Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent<sup>1</sup>.

(d) Atmospheric concentration of any substance which may exceed a permissible exposure limit (PEL)<sup>2</sup>.

(e) Any other atmospheric condition that is immediately dangerous to life or health<sup>3</sup>.

**Notes:** <sup>1</sup> 1 percent (%) = 10,000 parts per million (ppm).

<sup>2</sup> For additional information about atmospheric concentration, see chapter 296-62 WAC, General occupational health standards, Parts F, G, and I, and chapter 296-841 WAC, Airborne contaminants.

<sup>3</sup> For immediately dangerous to life or health values see <http://www.cdc.gov/niosh/idlh/idlhintr.html>.

An airborne concentration of a substance that is not capable of causing death, incapacitation, impairment to self-rescue, injury or acute illness due to its health effects is not covered by this definition.

For air contaminants, that have no WISHA-determined doses or permissible exposure limits (PELs) use other sources of information that can provide guidance in establishing acceptable atmospheric conditions, such as: Safety data sheets required by WAC 296-901-14014, published information and internal documents.

**Hazard elimination.** The temporary or permanent action taken to remove a hazard from the work environment. For confined spaces, this definition includes isolation. It does not include the use of forced air ventilation. For a hazard to be considered eliminated, the conditions that create or cause the hazard must no longer exist within the confined space.

**Host employer.** The employer that owns or manages the property where the work is taking place. In no case will there be more than one host employer.

**Notes:** If the owner of the property on which the construction activity occurs has contracted in writing with an entity for the general management of that property and has in writing transferred to that entity the information specified in WAC 296-809-20006, DOSH will treat the contracted management entity as the host employer for as long as that entity manages the property. Otherwise, DOSH will treat the owner of the property as the host employer.

**Hot work.** Operations capable of providing a source of ignition (for example, riveting, welding, cutting, burning, and heating).

**Hot work permit.** A written authorization to perform hot work operations, for example, riveting, welding, cutting, burning, and heating, that can provide a source of ignition.

**Immediately dangerous to life or health (IDLH).** Any of the following conditions:

(a) An immediate or delayed threat to life.

(b) Anything that would cause irreversible adverse health effects.

(c) Anything that would interfere with an individual's ability to escape unaided from a permit-required confined space.

**Notes:** Some materials - hydrogen fluoride gas and cadmium vapor, for example - may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse twelve to seventy-two hours after exposure. The victim "feels normal" after recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be "immediately dangerous to life or health (IDLH).

For immediately dangerous to life or health values see <http://www.cdc.gov/niosh/idlh/idlhintr.html>.

**Inerting.** The displacement of the atmosphere in a permit-required confined space by a noncombustible gas (such as nitrogen or argon) to such an extent that the resulting atmosphere is noncombustible. Inerting produces an IDLH oxygen-deficient atmosphere.

**Isolation.** The process of removing a permit-required confined space from service and completely protecting the employees against the release of energy and material into the space by:

- Blanking or blinding;
- Misaligning or removing sections of lines, pipes, or ducts;
- Double block and bleed system;
- Machine guarding;
- Blocking or disconnecting all mechanical linkages;
- Placement of barriers to eliminate the potential for employee contact with a physical hazard; or
- Lockout of all sources of energy.

**Note:** When using lockout, you must follow all the requirements of chapter 296-803 WAC, Lockout/tagout (control of hazardous energy).

**Limited or restricted means of entry or exit.** A condition that has a potential to impede an employee's movement into or out of a confined space. A space has limited or restricted means of entry or exit, if an entrant's ability to escape in an emergency would be hindered. Examples include, but are not limited to, trip hazards, poor illumination, slippery floors, inclining surfaces and ladders.

**Line breaking.** The intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

**Lockout.** Placing a lockout device on an energy-isolating device using an established procedure to make sure the machine or equipment cannot be operated until the lockout device is removed. For more information, see chapter 296-803 WAC, Lockout/tagout (control of hazardous energy).

**Lockout device.** A device that uses a positive means, such as a key or combination lock, to hold an energy-isolating device in the "safe" or "off" position. This includes blank flanges and bolted slip blinds.

**Lower flammable limit (LFL) or lower explosive limit (LEL).** The minimum concentration of a substance in air needed for an ignition source to cause a flame or explosion.

**Mobile worker.** An employee who performs work in multiple locations such as: Customer sites, company offices, private homes, vendor offices, or construction sites.

**Monitor or monitoring (see also testing).** The process used to identify and evaluate a potential hazardous atmosphere after an authorized entrant enters the space. This process checks for atmospheric changes. It is performed in a periodic or continuous manner after the completion of the initial testing or evaluation of that space.

**Nonentry rescue.** Retrieval of an entrant from a permit-required space without entering the permit space.

**Nonpermit confined space.** You will find the requirements for a nonpermit confined space in WAC 296-809-600.

**Oxygen deficient atmosphere.** An atmosphere containing less than 19.5 percent oxygen by volume.

**Oxygen enriched atmosphere.** An atmosphere containing more than 23.5 percent oxygen by volume.

**Permit-required confined space or permit space.** A confined space that has one or more of the following characteristics capable of causing death or serious physical harm:

(a) Contains or has a potential to contain a hazardous atmosphere;

(b) Contains a material with the potential for engulfing someone who enters;

(c) Has an internal configuration that could allow someone entering to be trapped or asphyxiated by inwardly converging walls or by a floor, which slopes downward and tapers to a smaller cross section;

(d) Contains any physical hazard. This includes any recognized health or safety hazards including engulfment in solid or liquid material, electrical shock, or moving parts;

(e) Contains any other recognized serious safety or health hazard that could either:

(i) Impair the ability to self-rescue; or

(ii) Result in a situation that presents an immediate danger to life or health.

**See Appendix B Examples of Permit-Required Confined Space Hazards by visiting the labor and industries website at <http://www.lni.wa.gov/safety/rules/chapter/809/>.**

**Permit-required confined space program (also known as a confined space program).** An overall program for:

(a) Controlling and appropriately protecting employees from permit-required confined space hazards; and

(b) Regulating employee entry into permit-required confined spaces.

**Physical hazard.** An existing or potential hazard that can cause death or serious physical damage. Examples include, but are not limited to: Explosives (as defined by WAC 296-52-60130); mechanical, electrical, hydraulic and pneumatic energy; radiation; temperature extremes; engulfment; noise; and inwardly converging surfaces. Physical hazards also include chemicals that can cause death or serious physical damage through skin or eye contact (rather than through inhalation).

**Potential hazards.** All reasonable anticipated conditions within a space and outside the space that can adversely affect the conditions within the space.

**Program administrator.** The person who has overall responsibility for your program and has sufficient training or experience with permit-required confined space entry to oversee program development, coordinate implementation, and conduct required evaluations of program effectiveness outlined in WAC 296-809-50006.

**Prohibited condition.** Any condition in a permit-required confined space not allowed by the permit during the authorized entry period. For example: A hazardous atmosphere is a prohibited condition unless the employer can demonstrate that personal protective equipment (PPE) will provide effective protection for each employee in the permit space and provides the appropriate PPE to each employee.

**Qualified person.** A person who has successfully demonstrated the ability to solve problems relating to the subject matter, work, or project, either by:

- Possession of recognized degree, certificate, or professional standing; or

- Extensive knowledge, training and experience.

**Representative permit space.** A mock-up of a confined space that has entrance openings that are similar to, and is of similar size, configuration, and accessibility to, the permit space that authorized entrants enter.

**Rescue.** Retrieving and providing medical assistance to one or more employees in a permit space.

**Rescue service.** The personnel designated to rescue employees from permit-required confined spaces.

**Retrieval system.** The equipment used for nonentry rescue of persons from permit-required confined spaces including; a retrieval line, chest or full-body harness, wristlets or anklets if appropriate, and a lifting device or anchor.

**Serious physical damage.** An impairment or illness in which a body part is made functionally useless or is substantially reduced in efficiency. Such impairment or illness may be permanent or temporary and includes, but is not limited to, loss of consciousness, disorientation, or other immediate and substantial reduction in mental efficiency. Injuries involving such impairment would usually require treatment by a physician or other licensed health care professional.

**Tagout.**

(a) Placement of a tagout device on a circuit or equipment that has been deenergized, in accordance with an established procedure, to indicate that the circuit or equipment being controlled may not be operated until the tagout device is removed; and

(b) The employer ensures that:

(i) Tagout provides equivalent protection to lockout; or

(ii) Lockout is infeasible and the employer has relieved, disconnected, restrained and otherwise rendered safe stored (residual) energy.

**Testing (see also monitoring).** The process of identifying and evaluating the hazards that entrants may be exposed to in a permit-required confined space. Testing includes specifying the initial atmospheric tests that are to be performed in the permit-required confined space.

**Note:** Testing allows employers to devise and implement adequate controls to protect entrants during entry, and to determine if acceptable entry conditions are present.

**Ventilate or ventilation.** The process of controlling a hazardous atmosphere using continuous forced-air mechanical systems. Ventilation is a method of hazard control, not hazard elimination.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-099, filed 1/2/18, effective 2/5/18. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 15-24-102, § 296-809-099, filed 12/1/15, effective 1/5/16.]