

Chapter 296-809 WAC

CONFINED SPACES

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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

296-809-700	Nonpermit confined spaces requirements. [Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 15-24-102, § 296-809-700, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-700, filed 1/20/04, effective 5/1/04.] Repealed by WSR 18-02-071, filed 1/2/18, effective 2/5/18. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW.
296-809-70002	Follow these requirements when classifying a confined space as a nonpermit confined space. [Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 15-24-102, § 296-809-70002, filed 12/1/15, effective 1/5/16; WSR 07-03-163, § 296-809-70002, filed 1/24/07, effective 4/1/07; WSR 04-03-081, § 296-809-70002, filed 1/20/04, effective 5/1/04.] Repealed by WSR 18-02-071, filed 1/2/18, effective 2/5/18. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW.
296-809-70004	Reevaluate nonpermit confined spaces if hazards develop. [Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 15-24-102, § 296-809-70004, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-70004, filed 1/20/04, effective 5/1/04.] Repealed by WSR 18-02-071, filed 1/2/18, effective 2/5/18. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW.

296-809-800 Definitions. [Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and 29 C.F.R. 1910 Subpart Z. WSR 14-07-086, § 296-809-800, filed 3/18/14, effective 5/1/14. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 07-05-062, § 296-809-800, filed 2/20/07, effective 4/1/07; WSR 04-03-081, § 296-809-800, filed 1/20/04, effective 5/1/04.] Repealed by WSR 15-24-102, filed 12/1/15, effective 1/5/16. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060.

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 web site 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 web site 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.

[Ch. 296-809 WAC p. 2]

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 percent¹.
- (d) Atmospheric concentration of any substance which may exceed a permissible exposure limit (PEL)².
- (e) Any other atmospheric condition that is immediately dangerous to life or health³.

Notes: ¹ 1 percent (%) = 10,000 parts per million (ppm).

² 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.

³ 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.

Note: 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 web site 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.]

WAC 296-809-100 Scope. This chapter applies to all confined spaces and provides requirements to protect employees from the hazards of entering and working in confined spaces. This chapter applies in any of the following circumstances:

(1) You have confined spaces in your workplace.

(2) Your employees will enter another employer's confined spaces.

(3) A contractor will enter your confined spaces.

(4) You provide confined space rescue services.

You can use Table 1 to help you decide which requirements to follow for confined spaces.

**Table 1
Requirements for Confined Spaces**

For confined spaces that are	The requirements in the following sections apply				
	200	300	400	500	600
Permit-required confined spaces.	X	X	X	X	X
Permit-required confined spaces entered by a contractor (or other outside employer).	X	X	X	X	X
Alternative methods.	X	X	X		X
Never entered.	X				
If you only:					
Have a contractor (or outside employer) enter your space, and you never enter yourself.	X				
Are a rescue service provider.		X	X	X	

Note: Requirements in other chapters may apply to your work. You can find a list of these rules in Appendix C Rules in Other Chapters that Cover Confined Spaces by visiting the labor and industries web site at <http://www.lni.wa.gov/safety/rules/chapter/809/>. You will find some safety and health requirements addressed on a broad level in this chapter, while being addressed for a specific application in another rule. When this happens, both requirements apply and should not conflict. When a conflict does occur, you need to follow the more specific requirement.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-100, 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, § 296-809-100, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-100, filed 1/20/04, effective 5/1/04.]

WAC 296-809-200 Identify and control entry into permit-required confined spaces.

Your responsibility:

To identify your permit-required confined spaces and control entry.

You must meet the requirements ...	in this section:
Identify permit-required confined spaces	WAC 296-809-20002
Inform employees and control entry to permit-required confined spaces	WAC 296-809-20004
Follow these requirements when you contract with another employer to enter your confined space	WAC 296-809-20006

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-200, 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, § 296-809-200, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-200, filed 1/20/04, effective 5/1/04.]

WAC 296-809-20002 Identify permit-required confined spaces. You must identify all permit-required confined spaces in your workplace. Use a person with the knowledge, skills, and abilities, capable of identifying actual and potential hazards related to permit-required confined spaces and with the authority to take prompt corrective action, such as an entry supervisor or competent person.

Important: Identification of Permit-Required Confined Space(s) involves a two-step process.

Step 1: Identify confined spaces.

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

- Large enough and arranged so an employee could fully enter the space and work.

- 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.

- Not primarily designed for continuous human occupancy.

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

Step 2: Evaluate the actual and potential hazards of each confined space to identify the permit-required confined space(s).

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.

- Contains or has a potential to contain a hazardous atmosphere.
- Contains a material with the potential for engulfing someone who enters.
- 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.
- Contains any physical hazard. This includes any recognized health or safety hazards including engulfment in solid or liquid material, electrical shock, or moving parts.
- Contains any other recognized serious safety or health hazard that could either:
 - (a) Impair the ability to self-rescue; or
 - (b) 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 web site at <http://www.lni.wa.gov/safety/rules/chapter/809/>.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-20002, 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, § 296-809-20002, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-20002, filed 1/20/04, effective 5/1/04.]

WAC 296-809-20004 Inform employees and control entry to permit-required confined spaces. (1) You must provide information about confined spaces as follows:

- (a) Make available to affected employees and their authorized representatives all information and documents required by this chapter.
- (b) Inform affected employees about the existence, location, and danger of any permit-required confined spaces in your workplace by:
 - (i) Posting danger signs;¹ or
 - (ii) Using any other equally effective means to inform employees.²

(2) You must take effective measures to prevent unauthorized employees from entering permit-required confined spaces.³

Notes:

¹ A sign reading "Danger—Permit Required Confined Space, DO NOT ENTER" or using pictures or other similar wording employees can understand would satisfy the requirement for a sign.

² Equally effective means must warn employees about the existence, location and danger of permit-required confined spaces for all affected employees.

³ Examples of measures to prevent employee entry include: Padlocks, bolted covers, use of special tools to remove covers along with, employee training, and permanently closing the space, such as welding it closed.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-20004, 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, § 296-809-20004, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-20004, filed 1/20/04, effective 5/1/04.]

WAC 296-809-20006 Follow these requirements when you contract with another employer to enter your confined space. You must do **all** of the following if you arrange to have another employer (contractor) perform work that involves entry into your permit-required confined space:

- (1) Inform the contractor:
 - (a) That the workplace contains permit-required confined spaces and entry is allowed only if the applicable requirements of this chapter are met.
 - (b) Of the identified hazards and your experience with each permit-required confined space.
 - (c) Of any precautions or procedures you require for the protection of employees in or near spaces where the contractor will be working.
- (2) Coordinate entry operations with the contractor, when either employees or employers from the different companies will be working in or near permit-required confined spaces.
- (3) Discuss entry operations with the contractor when they are complete. Include the following in your discussion:
 - (a) The program followed during confined space entry; and
 - (b) Any hazards confronted or created.

Note: All employers are responsible for following all confined space requirements in this chapter and in other chapters that apply.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-20006, 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, § 296-809-20006, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-20006, filed 1/20/04, effective 5/1/04.]

49.17.060. WSR 15-24-102, § 296-809-20006, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-20006, filed 1/20/04, effective 5/1/04.]

WAC 296-809-300 Permit-required confined space program.

Your responsibility:

To develop your permit-required confined space program and practices.

Important:

This section applies if employees will enter a permit-required confined space.

Before your employees enter you must meet these requirements ...	in this section:
Develop a written permit-required confined space program	WAC 296-809-30002
Meet these additional requirements if your employees enter another employer's confined space	WAC 296-809-30004

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-300, 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, § 296-809-300, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-300, filed 1/20/04, effective 5/1/04.]

WAC 296-809-30002 Develop a written permit-required confined space program.

Important:

Identify and evaluate the hazards of permit-required confined spaces and the work performed, to assist you in developing your entry program and entry procedures.

(1) You must develop a written program, before employees enter confined spaces, that describes the means, procedures, and practices you use for the safe entry of permit-required confined spaces as required by this chapter. Include the following:

- (a) Documentation of permit entry procedures.¹
- (b) Designation of employees that have active roles, including; attendants, competent persons, entrants, entry supervisors, rescuers, program administrator, or those who test or monitor the atmosphere in a permit-required space.
- (c) Identification of each designated employee's duties.
- (d) Training employees on their designated roles.
- (e) How to identify and evaluate hazards.
- (f) Use and maintenance of equipment.
- (g) How to prevent unauthorized entry.
- (h) How to coordinate entry with another employer.
- (i) How to rescue entrants.
- (j) If you intend to enter using alternative methods for entry, the procedures must address all measures used before entry to isolate and eliminate hazards from the space and control potential atmospheric hazards.
 - (i) Identify the entry supervisor who authorizes the use of the alternative methods and has the responsibility for ensuring safe entry conditions.
 - (ii) The hazards of the space.

- (iii) The methods used to eliminate hazards including verification.
- (iv) The methods used to ensure that the hazards are eliminated.
- (v) The methods used to test and monitor the atmosphere within the space, where applicable, for all atmospheric hazards.
- (vi) The methods used to determine if unsafe conditions arise before or during entry.
- (vii) The criteria and conditions for evacuating the space during entry (like monitoring and test data).
- (viii) Methods for training employees in these procedures.
- (ix) The methods used to ensure employees follow these procedures.
- (x) Documentation required. For examples of documentation, see Appendix J Alternative Method Documentation by visiting the labor and industries web site at <http://www.lni.wa.gov/safety/rules/chapter/809/>.

- (2) You must consult with affected employees and their authorized representatives when developing and implementing all aspects of your program.
- (3) You must make the written program available to employees and their authorized representatives.
- (4) You must update your written program as necessary when you have identified deficiencies. Revise your program and entry procedures before allowing subsequent entries.
- (5) You must designate a confined space program administrator 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.

Note: ¹ Examples of safe work procedures include, but are not limited to: Communication, hazard identification, monitoring and testing, energy control (lockout), ventilation (purging, flushing, use of local exhaust), inerting, engulfment control, equipment use, equipment maintenance, coordination with another employer, emergency evacuation, rescue, and hazard elimination procedures.

If you have multiple spaces assigned to one attendant, include the procedures necessary to enable the attendant to fulfill their required responsibilities and respond to an emergency. See WAC 296-809-50010, Table 2.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-30002, 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, § 296-809-30002, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-30002, filed 1/20/04, effective 5/1/04.]

WAC 296-809-30004 Meet these additional requirements if your employees enter another employer's confined space. (1) You must obtain any available information about permit-required confined space hazards and entry operations from the host employer.

- (2) You must coordinate entry operations with any other employers whose employees will be working in or near the permit-required confined space.
- (3) You must inform the host employer, either through a debriefing or during entry operations, about:
 - (a) The entry program you will follow; and

- (b) Any hazards you confronted or created in the space during entry operations.

Note: This would include any additional permit-required confined spaces identified by you.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-30004, 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, § 296-809-30004, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-30004, filed 1/20/04, effective 5/1/04.]

WAC 296-809-400 Employee training.

Your responsibility:

To make sure employees are trained to perform their designated roles safely.

You must meet these requirements prior to entry into permit-required confined spaces ...	in this section:
Provide employee training	WAC 296-809-40002
Certify employee proficiency	WAC 296-809-40004

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-400, 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, § 296-809-400, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-400, filed 1/20/04, effective 5/1/04.]

WAC 296-809-40002 Provide employee training. (1)

You must provide training at no cost to each employee involved in permit-required confined space activities. The training must be in a language and vocabulary they understand, so they acquire the understanding, knowledge and skills necessary to safely¹ perform assigned duties.

- (a) Establish employee proficiency in their confined space duties².
- (b) Introduce new or revised procedures as necessary.
 - (2) You must provide training to each affected employee;
 - (a) Before an employee is first assigned to duties covered by this chapter.
 - (b) Before there is a change in an employee's assigned duties.
 - (c) When there is a permit-required confined space hazard for which the employee has not already been trained.
 - (d) Retrain your employees if there are either:
 - (i) Deviations from your procedures for permit-required confined space entry; or
 - (ii) Employee knowledge or use of your procedures is inadequate.

Notes: ¹ Training topics include, but are not limited to:

- Roles and responsibilities;
- Hazards of the permit space;
- Procedures from your program created to protect employees, such as methods used to isolate and control hazards, equipment use, equipment maintenance and evacuation;
- For individuals **not** authorized to perform rescue, the dangers of attempting unauthorized rescue.

² Employers can determine employee proficiency by:

- Systematically observing employee performance using safe work procedures and equipment to perform specific job tasks during training exercises that simulate actual confined space conditions;
- A comprehensive written exam; or
- Any other method that is effective for the employer.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-40002, 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, § 296-809-40002, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-40002, filed 1/20/04, effective 5/1/04.]

WAC 296-809-40004 Certify employee proficiency.

(1) You must determine and certify employee proficiency in their assigned duties.

(2) You must make sure the certification:

- (a) Contains each employee's name, the trainer's written or electronic signature or initials, and the dates of training.
- (b) Is available for inspection by employees and their authorized representatives.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-40004, 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, § 296-809-40004, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-40004, filed 1/20/04, effective 5/1/04.]

WAC 296-809-500 Permit entry procedures.

Your responsibility:

To establish procedures for the safe permit-required entry of confined spaces.

You must meet the requirements ...	in this section:
Implement procedures for safe entry into permit-required confined spaces	WAC 296-809-50002
Use an entry permit that contains all required information	WAC 296-809-50004
Keep and review your entry permits	WAC 296-809-50006
Prevent unauthorized entry	WAC 296-809-50008
Provide, maintain and use proper equipment	WAC 296-809-50010
Evaluate and control hazards for safe entry	WAC 296-809-50012
Make sure you have adequate rescue and emergency services available	WAC 296-809-50014
Use nonentry rescue systems or methods whenever possible	WAC 296-809-50016
Make sure entry supervisors perform their responsibilities and duties	WAC 296-809-50018
Provide an attendant outside the permit-required confined space	WAC 296-809-50020

You must meet the requirements ...	in this section:
Make sure entrants know the hazardous conditions and their duties	WAC 296-809-50022
Implement procedures for ending entry	WAC 296-809-50024

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-500, 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, § 296-809-500, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-500, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50002 Implement procedures for safe entry into permit-required confined spaces. (1) You must identify and evaluate, before employees enter, potential hazards from:

- (a) The permit-required confined space; and
- (b) The work to be performed.

(2) You must complete an entry permit before entry is authorized, documenting that you have completed the means, procedures and practices necessary for safe entry and work.

(3) You must make sure that entrants or their representatives have an opportunity to observe any monitoring or testing, or any actions to eliminate or control hazards, performed to complete the permit.

(4) You must identify the entry supervisor and make sure the entry supervisor signs the entry permit, authorizing entry, before the space is entered.

(5) You must make the completed permit available to entrants or their authorized representatives at the time of entry so they can confirm the implementation of the preentry preparations. Do this by either posting the completed permit at the entry location, or by any other equally effective means.

(6) You must make sure the duration of the permit does not exceed the time required to complete the assigned task or job identified on the permit.

(7) You must note any problems encountered during an entry operation on the permit. Use the information to make appropriate revisions to your program, entry operations, means, systems, procedures and practices.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-50002, 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, § 296-809-50002, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-50002, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50004 Use an entry permit that contains all required information. You must make sure your entry permit identifies **all** of the following that apply to your entry operation:

- (1) The space to be entered.
- (2) Purpose of the entry.
- (3) Date and the authorized duration of the entry permit.
- (4) Hazards of the space to be entered.
- (5) Acceptable entry conditions.

(6) Results of initial and periodic tests performed to evaluate and identify the hazards and conditions of the space, accompanied by the names or initials of the testers and by an indication of when the tests were performed.

(7) Appropriate measures used before entry to isolate the space, and eliminate or control hazards. Examples of appropriate measures include the lockout or tagging of equipment and procedures for purging, inerting, ventilating, and flushing permit-required confined spaces.

(8) Names of entrants and current attendants. Other means include the use of rosters or tracking systems as long as the attendant can determine quickly and accurately, for the duration of the permit, which entrants are inside the space.

(9) The current entry supervisor.

(10) The signature or initials of the original supervisor authorizing entry.

(11) Communication procedures for entrants and attendants to maintain contact during the entry.

(12) Equipment provided for safe entry, such as:

(a) Personal protective equipment (PPE).

(b) Testing equipment, including equipment capable of detecting an increase in atmospheric hazard levels in the event the ventilation system stops working.

(c) Communications equipment.

(d) Alarm systems.

(e) Rescue equipment.

(13) Rescue and emergency services available, and how to contact them. Include equipment to use, and names and contact information.

(14) Other information needed for safety in the particular confined space.

(15) Additional permits issued for work in the space, such as for hot work.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-50004, 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, § 296-809-50004, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-50004, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50006 Keep and review your entry permits. (1) You must review your program and entry operations when measures taken under your permit-required confined space entry program may not protect employees. Review your program as necessary to correct deficiencies before allowing subsequent entries.¹

(2) You must keep the canceled entry permits for at least one year to facilitate the review of the permit-required confined space program. Use the canceled entry permits within one year following each entry to review and evaluate both your program and the protection provided to employees entering permit-required confined spaces.² Update your written permit-required confined space entry programs as necessary to correct deficiencies before allowing subsequent entries.

(3) You must keep entry permits or other atmospheric monitoring records that show the actual atmosphere an employee entered or worked in, as employee exposure records.³

Notes: ¹ Examples of circumstances requiring the review of your program include the following:

- There is unauthorized entry of a permit space.
- A permit space hazard not covered by the permit is found.
- A condition prohibited by the permit occurs.
- An injury or near-miss occurs during entry.

- There is a change in the use or configuration of a permit space.
- An employee complains about the effectiveness of the program.

² Employers may perform a single annual review covering all entries performed during a twelve-month period. If no entry is performed during a twelve-month period, no review is necessary.

³ Keep employee exposure records according to chapter 296-802 WAC, Employee medical and exposure records.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-50006, 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, § 296-809-50006, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-50006, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50008 Prevent unauthorized entry.

(1) You must implement measures necessary to prevent unauthorized entry into permit-required confined spaces, when conducting authorized entry.

(2) You must protect entrants and those outside the confined space from hazards when removing entrance covers.

Note: Examples of measures to prevent unauthorized entry are signs, physical barricades, warning tape, and an attendant.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-50008, 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, § 296-809-50008, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-50008, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50010 Provide, maintain, and use proper equipment. (1) You must provide the equipment in Table 2, when needed and at no cost to employees.

(2) You must make sure that employees use provided equipment properly.

(3) You must maintain the provided equipment.

**Table 2
Equipment Provided to Employees at No Cost**

Type of equipment	Used for
Testing and monitoring equipment	Evaluating permit-required confined space conditions
Ventilating equipment	Obtaining and maintaining acceptable entry conditions
Communication equipment	Effective communication between the attendant and the entrants and to initiate rescue when required
Personal protective equipment (PPE)	Protecting employees from hazards of the space or the work performed
Lighting equipment	Employees to see well enough to work safely and to exit the space quickly in an emergency
Barriers or shields, such as pedestrian, vehicle or other barriers	Protecting employees from hazards outside of the space

Type of equipment	Used for
Ladders	Safe entry and exit by entrants
Rescue and emergency equipment, except for equipment provided by the rescue service provider	Safe and effective rescue
Any other equipment	Safe entry into and rescue from permit-required confined spaces

Note: Equipment that is unsuitable for retrieval must not be used including, but not limited to, retrieval lines that have reasonable probability of becoming entangled with the retrieval lines used by other authorized entrants, or retrieval lines that will not work due to the internal configuration of the permit space.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-50010, 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, § 296-809-50010, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-50010, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50012 Evaluate and control hazards for safe entry. (1) You must evaluate and control hazards for safe entry into permit-required confined spaces by doing all the following:

- (a) Test for atmospheric hazards, in this order:
 - (i) Oxygen.
 - (ii) Combustible gases and vapors.
 - (iii) Toxic gases and vapors.
- (b) Provide each entrant or their authorized representative an opportunity to observe any of the following:
 - (i) Preentry testing.
 - (ii) Subsequent testing.
 - (iii) Monitoring of permit-required spaces.
- (c) Reevaluate the permit-required space in the presence of any entrant, or their authorized representative, who requests this to be done because they have reason to believe that the evaluation of that space may not have been adequate.
- (d) Upon request, immediately provide each entrant or their authorized representative, with the results of any testing required by this rule.
- (e) Continuously monitor the atmosphere in areas where entrants are working, when isolation of the space is not feasible.

Examples include large spaces or a space that is part of a continuous system, such as a sewer.

(2) You must evaluate space conditions during entry as follows:

**Table 3
Evaluating Space Conditions**

You must:	In order to
Test conditions before entry	Determine that acceptable entry conditions exist before entry is authorized by the entry supervisor
Test or evaluate space conditions during entry	Determine that acceptable entry conditions are being maintained during entry operations

You must:	In order to
Evaluate entry operations	Make sure entrants of more than one employer working at the same time in or around a permit-required confined space, do not endanger each other

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-50012, 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, § 296-809-50012, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-50012, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50014 Make sure you have adequate rescue and emergency services available. (1) You must make sure you have adequate rescue and emergency services available during your permit-required confined space entry operations.¹

- (a) Evaluate and select rescue teams or services who can:
 - (i) Respond to a rescue call in a timely manner.² Timeliness is based on the identified hazards. Rescuers must have the capability to reach potential victims within an appropriate time frame based on the identified permit space hazards.
 - (ii) Proficiently rescue employees from a permit-required confined space in your workplace. Rescuers must have the appropriate equipment for the type of rescue.
 - (iii) Agree to notify you immediately in the event that the rescue service becomes unavailable.
- (b) Make sure that at least one member of the rescue team or service holds a current certification in first aid and cardiopulmonary resuscitation (CPR).
- (c) Inform each rescue team or service about the hazards they may confront when called to perform rescue.
- (d) Provide the rescue team or service with access to all permit spaces from which rescue may be necessary. This will allow them to develop appropriate rescue plans and to practice rescue operations.
- (2) You must provide employees assigned to provide permit-required confined space rescue and emergency services, at no cost to the employee, with:
 - (a) Personal protective equipment (PPE) needed for safe entry.
 - (b) Other equipment required to conduct rescues safely.
 - (c) Training so they are:
 - (i) Proficient in the use of the PPE and other equipment.
 - (ii) Proficient as an entrant of permit-required confined spaces.
 - (iii) Able to safely perform assigned rescue and emergency duties.
 - (iv) Knowledgeable in basic first aid and cardiopulmonary resuscitation (CPR).
 - (d) Practice sessions for permit-required confined space rescues **at least** once every twelve months where dummies, manikins, or actual persons are removed from either:
 - (i) The actual permit spaces; or
 - (ii) Representative permit spaces that simulate the opening size, configuration, and accessibility, of permit spaces where rescue will be performed.
- (3) You must establish procedures for:
 - (a) Contacting rescue and emergency services.
 - (b) Rescuing entrants from permit-required confined spaces.

(c) Providing necessary emergency services to rescued entrants.

(d) Preventing unauthorized persons from attempting a rescue.

Notes: ¹ The following is not considered to be adequate rescue and emergency services:

- Planning to rely on a rescue service and posting a contact number (like "911") without contacting them and completing an evaluation in advance to ensure they meet the criteria of this standard.

² Timely rescue will vary according to the specific hazards involved in each entry. For example, chapter 296-842 WAC, Respirators, requires that employers provide a standby person or persons capable of immediate action to rescue employee(s) for work areas considered to contain an IDLH atmosphere.

Note: See Appendix H - Evaluating Rescue Teams or Services by visiting the labor and industries web site at <http://www.lni.wa.gov/safety/rules/chapter/809/>.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-50014, 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, § 296-809-50014, filed 12/1/15, effective 1/5/16; WSR 09-05-071, § 296-809-50014, filed 2/17/09, effective 4/1/09; WSR 04-03-081, § 296-809-50014, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50016 Use nonentry rescue systems or methods whenever possible. (1) You must use nonentry retrieval systems or methods to rescue entrants in a permit-required confined space unless this:

(a) Would increase the overall risk of injury to entrants; or

(b) Would not contribute to the rescue of the entrant.

(2) You must make sure each entrant uses a chest or full-body harness, with a retrieval line attached to the harness at one of the following locations:

(a) At the center of the employee's back, near shoulder level.

(b) Above the employee's head.

(c) At another point which presents a profile small enough for the successful removal of the employee.

(3) You must attach the retrieval line to a mechanical device or fixed point outside the space, so rescue can begin as soon as necessary.

(4) You must make sure a mechanical device is available to retrieve entrants from vertical spaces more than five feet (1.52 m) deep.

Note: When you can demonstrate that the use of a chest or full-body harness is not feasible or creates a greater hazard, then you may use wristlets or another method shown to be the safest and most effective alternative.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 15-24-102, § 296-809-50016, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-50016, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50018 Make sure entry supervisors perform their responsibilities and duties. You must make sure that an entry supervisor:

(1) Authorizes the entry into a permit-required confined space by signing the entry permit.

(2) Oversees entry operations.

(3) Knows about the hazards that may be faced during entry, including the mode, signs or symptoms, and consequences of the exposure.

(1/2/18)

(4) Verifies and checks **all** of the following:

(a) The appropriate entries have been made on the permit.

(b) All tests specified by the permit have been conducted.

(c) All procedures and equipment specified by the permit are in place before approving the permit and allowing entry to the space.

(5) Terminates the entry and cancels the permit when:

(a) The assigned task or job has been completed.

(b) A condition in the space that is not covered by the entry permit is discovered.

(6) Verifies rescue services are available and the means to contact them is operable; and ensures the employer will be notified as soon as the service becomes unavailable.

(7) Removes unauthorized individuals who enter or attempt to enter the permit-required confined space during entry operations.

(8) Determines that entry operations remain consistent with the terms of the entry permit and acceptable entry conditions are maintained:

(a) Whenever responsibility for a permit-required space entry operation is transferred; and

(b) At regular intervals dictated by the hazards and operations performed within the space. If the rescue service becomes unavailable during the course of the permit-required confined space entry, you must immediately cancel the entry and permit.

Notes:

- Make sure entry supervisors have the required knowledge and proficiency to perform the job duties and responsibilities required by this chapter.
- The entry supervisor may also perform other duties under this chapter, such as attendant or entrant, if they are trained and proficient in those duties.
- The responsibility of the entry supervisor may be passed from one supervisor to another during an entry operation.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-50018, 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, § 296-809-50018, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-50018, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50020 Provide an attendant outside the permit-required confined space.

Important:

1. The number of attendants assigned should be tailored to the requirements of the space and the work performed.

2. You need to assess if it is appropriate or possible to have multiple permit spaces monitored by a single attendant, or have an attendant stationed at a location outside each space. Video cameras and radios are examples of tools that may assist an attendant monitoring more than one space.

3. Attendants may be stationed at any location outside the permit-required confined space if the duties described in this section can be effectively performed for each space that is monitored.

(1) You must provide at least one attendant who must remain outside the permit-required confined space during entry operations.

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(2) You must make sure each permit-required confined space attendant:

(a) Understands the hazards that may be faced during entry, including the mode, signs or symptoms, and results of exposure to the hazards.

(b) Is aware of the behavioral effects of exposure to the hazard.

(c) Continuously maintains an accurate count of entrants in the space.

(d) Maintains an accurate record of who is in the permit-required confined space.

(e) Communicates with entrants as necessary to monitor their status or alert them of the need to evacuate the space.

(f) Monitors activities inside and outside the space to determine if it is safe for entrants to remain in the space.

(g) Orders entrants to evacuate the space immediately if **any** of the following conditions occur:

(i) A prohibited condition.

(ii) The behavioral effects of hazardous exposure in an entrant.

(iii) A situation outside the space that could endanger entrants.

(iv) The attendant cannot effectively and safely perform all the duties required in this chapter.

(h) Takes the following actions when unauthorized persons approach or enter a space:

(i) Warn unauthorized persons to stay away from the space.

(ii) Tells the unauthorized persons to exit immediately if they have entered the space.

(iii) Informs entrants and the entry supervisor if unauthorized persons have entered the space.

(i) Performs nonentry rescues as specified by the rescue procedure.

(j) Has the means to respond to an emergency affecting one or more of the permit spaces being monitored without preventing performance of the attendant's duties to the other spaces being monitored.

(k) Carries out no duties that might interfere with their primary duty to monitor and protect the entrants.

(l) Calls for rescue and other emergency services as soon as entrants may need assistance to escape from the space.

(m) Monitors entry operations until relieved by another attendant or all entrants are out of the space.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-50020, 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, § 296-809-50020, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-50020, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50022 Make sure entrants know the hazardous conditions and their duties. You must make sure that all entrants:

(1) Know the hazards they may face during entry, including the mode, signs or symptoms, and results of exposure to the hazards.

(2) Use equipment properly.

(3) Communicate with the attendant as necessary so the attendant can:

(a) Monitor entrant status; and

(b) Alert entrants of the need to evacuate.

(4) Alert the attendant whenever either of these situations exist:

(a) A warning sign or symptom of exposure to a dangerous situation such as, behavioral changes, euphoria, giddiness potentially from lack of oxygen or exposure to solvents.

(b) A prohibited condition.

(5) Exit from the permit-required confined space as quickly as possible when one of the following occurs:

(a) The attendant or entry supervisor gives an order to evacuate.

(b) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation.

(c) The entrant detects a prohibited condition.

(d) An evacuation alarm is activated.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-50022, 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, § 296-809-50022, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-50022, filed 1/20/04, effective 5/1/04.]

WAC 296-809-50024 Implement procedures for ending entry. You must make sure you terminate the entry when entry operations are completed, including securing an entrance cover and canceling the permit.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 15-24-102, § 296-809-50024, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-50024, filed 1/20/04, effective 5/1/04.]

WAC 296-809-600 Alternative methods.

Your responsibility:

To know when you can use alternative methods and documentation.

Important:

In addition to this section, you also need to meet the requirements in the following sections of this chapter:

1. WAC 296-809-200 Identify and control permit-required confined spaces.
2. WAC 296-809-300 Permit-required confined space program.
3. WAC 296-809-400 Employee training.

You must meet the requirements ...	in this section:
Make sure the following conditions are met if using alternative methods	WAC 296-809-60002
Implement alternative methods for each permit-required confined space that meet the criteria	WAC 296-809-60004

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-600, 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, § 296-809-600, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-600, filed 1/20/04, effective 5/1/04.]

WAC 296-809-60002 Make sure the following conditions are met if using alternative methods. (1) You may enter permit-required confined spaces without a permit using alternative methods when you have monitoring and inspection data that supports the following:

(a) You have eliminated all the hazards¹; or

(b) You have eliminated all of the physical hazards^{1,2}, and continuous forced air ventilation controls the actual or potential hazardous atmosphere. You must also have monitoring data that demonstrates the use of continuous forced air ventilation will maintain the permit-required confined space for safe entry. In the event the ventilation system stops working, entrants can exit the space safely.

(2) You must have written documentation for the entrants before each entry that includes the following information:

- (a) The location of the space;
- (b) Date of the entry;
- (c) Duration of the entry;
- (d) The hazards of the space and the work;
- (e) The specific measures used to eliminate the hazards¹;
- (f) The ventilation system used to control atmospheric hazards, when applicable, direct reading instruments used to test the atmosphere, and results of the atmospheric testing that demonstrate the absence of a hazardous atmosphere;^{1,2}

(g) All conditions that required evacuation of the space³; and

(h) The name, title, and signature of the entry supervisor ensuring safe entry procedures.

(3) You must make sure all documentation produced is available to each affected employee and their authorized representative.

(4) You must make sure all monitoring and inspection data is documented and available to each affected employee and their authorized representative.

(5) If you must enter prior to the completion of the hazard elimination, you must perform the entry according to WAC 296-809-500 Permit entry procedures. For example - To collect monitoring inspection data or to apply hazard elimination measures.

Notes: ¹ For the purposes of this section, energy control procedures must isolate the space and result in the elimination of the hazards including applicable stored energy. Evaluate your energy control procedures (lockout) to ensure they fully eliminate the hazards when used. See chapter 296-803 WAC, Lockout/tagout (control of hazardous energy). Tagout is an example of a method not considered to eliminate hazards.

² Controlling atmospheric hazards through forced air ventilation does not eliminate the hazards.

³ Do not use alternative methods to enter a continuous system unless you can do the following:

- Completely isolate the area entered from the rest of the space;
- Demonstrate that the conditions that caused the hazard or potential hazard no longer exist within the system for the duration of the entry including engulfment; and
- You have sufficient quantities of continuous ventilation to control the atmospheric hazard.

See Appendix J for Alternative Methods Documentation by visiting the labor and industries web site at <http://www.lni.wa.gov/safety/rules/chapter/809/>.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-60002, 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, § 296-809-60002, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-60002, filed 1/20/04, effective 5/1/04.]

WAC 296-809-60004 Implement alternative methods for each permit-required confined space that meet the

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criteria. (1) You must implement your procedures for hazard elimination and alternative methods from your written program.

(2) Before entry, eliminate any unsafe conditions including removing an entrance cover.

When entrance covers are removed, promptly guard the opening with a railing, temporary cover, or other temporary barrier to prevent any accidental falls through the opening and protect entrants from objects falling into the space.

(3) For spaces with potential atmospheric hazards you must do all of the following:

(a) Test before an employee enters the confined space. Use a calibrated, direct-reading instrument to test the internal atmosphere for all of the following, in this order:

- (i) Oxygen content.
- (ii) Flammable gases and vapors.
- (iii) Potential toxic air contaminants.

(b) Make sure the atmosphere within the space is not hazardous when entrants are present. Continuously test the atmosphere within the space to ensure hazards do not accumulate.

(c) Use continuous forced air ventilation, as follows:

(i) Wait until the forced air ventilation has removed any hazardous atmosphere before allowing entrants into the space.

(ii) Direct forced air ventilation toward the immediate areas where employees are, or will be working. Continue ventilation until all employees have left the space.

(iii) Provide the air supply from a clean source and make sure it does not increase hazards in the space.

(4) Provide entrants, or their authorized representatives, with an opportunity to observe the preentry and periodic testing.

(5) Evacuate employees from the space immediately when any of the following occurs:

- (a) Detection of a hazardous atmosphere by air-monitoring instrumentation;
- (b) Failure of a direct-reading instrument;
- (c) Any failure of the ventilation; or
- (d) Introduction of a hazard; a hazard develops; or conditions change within a space.

(6) When a space is evacuated, it cannot be reentered as alternative methods unless you do all of the following:

- (a) Correct conditions that necessitated evacuation.
- (b) Treat any reentry as a new entry.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 18-02-071, § 296-809-60004, 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, § 296-809-60004, filed 12/1/15, effective 1/5/16; WSR 04-03-081, § 296-809-60004, filed 1/20/04, effective 5/1/04.]