

PART 15

CONFINED SPACES

GENERAL REQUIREMENTS

Application

15.1 This Part applies to every workplace where a worker works in a confined space.

Safe work procedures

15.2(1) An employer must

- (a) develop and implement safe work procedures for working in a confined space;
- (b) train workers in the safe work procedures; and
- (c) ensure that workers comply with the safe work procedures.

15.2(2) The safe work procedures must include

- (a) procedures for recognizing the risks associated with working in the confined space;
- (b) procedures for isolating - including blanking, disconnecting, interrupting and locking out - pipes, lines and sources of energy from a confined space;
- (c) safety and personal protective equipment to be used;
- (d) procedures for communicating with a standby worker;
- (e) an emergency response plan and rescue procedures to be implemented in the event of an accident or other emergency in a confined space; and
- (f) information about the entry permit system under section 15.4.

General requirements

15.3 Before requiring a worker to enter or work in a confined space, an employer must

- (a) identify and assess the risks to safety or health a worker is likely to be exposed to while in the confined space;
- (b) identify and take measures to reduce, control or eliminate the risks to safety or health associated with the confined space, including

- (i) using alternative means of performing the work to be done that will not require the worker to enter the space, and
 - (ii) making alterations to the physical characteristics of the space that may be necessary to ensure safe access to and egress from all accessible parts of the space;
- (c) identify the appropriate type and frequency of tests and inspections necessary to determine the likelihood of a worker being exposed to any of the identified risks, and ensure those tests and inspections are completed by a competent person;
- (d) identify the safety and personal protective equipment required to be used or worn in the confined space by a worker while he or she performs work;
- (e) identify emergency and personal protective equipment required by a worker who undertakes rescue operations in the event of an accident or other emergency within the confined space; and
- (f) establish and implement an entry permit system for a confined space, in accordance with section 15.4.

Entry permit

15.4(1) An entry permit system established by an employer under clause 15.3(f) must

- (a) ensure that an entry permit containing the following information is completed and signed by a competent person before a worker enters a confined space:
- (i) the location of the confined space,
 - (ii) the name of each worker who will enter the confined space and the reason for their entry,
 - (iii) the date and time during which the permit is valid; and
- (b) specify
- (i) the work being done in the confined space,
 - (ii) the safe work procedures for entering, being in and leaving a confined space, and

(iii) all hazards to the safety and health of a worker identified by the risk assessment carried out under clause 15.3(a).

15.4(2) An employer must ensure that a copy of the completed and signed entry permit is readily available at the site of the confined space.

Review of entry permit

15.5(1) An employer must review and revise an entry permit when

- (a) a work activity in a confined space changes;
- (b) circumstances at the workplace or in a confined space change in a way that poses a risk to the safety or health of a worker; or
- (c) any of the workers or information listed in the permit changes.

15.5(2) An employer must ensure that a worker who may be affected by a change to an entry permit or a work activity in a confined space is informed of the change.

No unauthorized entry

15.6 An employer and an owner must take all steps reasonably practicable to prevent any person, other than a worker who is required or permitted to do so, from entering a confined space.

SPECIFIC REQUIREMENTS

Requirements before confined space is entered

15.7(1) An employer must, before requiring or permitting a worker to enter or work in a confined space,

- (a) ensure that the worker entering the space wears a full-body harness attached to a lifeline that is attached to a personal hoisting device, unless an alternate safe method of access and egress is provided from all accessible parts of the confined space;
- (b) identify and take measures to ensure that a worker will not be exposed to the risk of drowning or becoming engulfed or entrapped in any liquid or free-flowing solid that may be present in the confined space; and
- (c) identify and take measures to ensure that all energy sources that present a hazard to a worker entering, occupying or leaving the confined space have been locked out, and the energy sources have been put in a

zero energy state.

15.7(2) An employer must ensure that the structural integrity of a confined space is maintained when its physical characteristics are altered in order to ensure safe access and egress by a worker.

Standby worker

15.8(1) An employer must ensure that

(a) a standby worker is designated for every confined space; and

(b) the standby worker remains present at the entrance to a confined space at all times while a worker is in the space if the risk assessment done under clause 15.3(a) has identified that the space is or may become hazardous to a worker entering it for any reason, including:

(i) the design or construction of the confined space,

(ii) the materials or substances in the confined space, including the materials or substances in its atmosphere, or

(iii) the work activities performed or the processes used in the confined space.

15.8(2) An employer must ensure that

(a) a worker designated as a standby worker is

(i) qualified as a first aider 1, 2 or 3, as set out in Part 5 (First Aid), and

(ii) trained in confined space work and emergency and rescue procedures;

(b) the designated standby worker

(i) is in direct communication with the worker in the confined space, and

(ii) has a suitable system to summon assistance if necessary; and

(c) the worker in the confined space is able to directly communicate with the standby worker.

Traffic hazards

15.9 An employer must ensure that appropriate barricades and warning signs are provided to keep vehicle and pedestrian traffic away from a confined

space in which work is, or is about to be, carried out.

Purging and ventilating unsafe atmosphere

15.10(1) In the following circumstances, an employer must ensure that a confined space is purged, ventilated or both before a worker is required or permitted to enter it:

(a) where there is or may be a concentration of a flammable or explosive substance present at more than 10% of its lower explosive limit, the space must be purged, ventilated or both so that the concentration is reduced to less than 10%;

(b) where there is or may be an oxygen deficiency - oxygen content less than 19.5% by volume - or oxygen enrichment - oxygen content greater than 23% by volume - the space must be purged, ventilated or both so that the oxygen content is at least 19.5% but not more than 23%;

(c) subject to subsection (2), where there is or may be a chemical or biological substance that creates a risk to the safety or health of the worker, the space must be purged, ventilated or both to the extent possible to eliminate or reduce the risk associated with the substance.

15.10(2) When a worker occupies a confined space that has an atmosphere that may create a risk to the safety or health of a worker, the employer must ensure that

(a) the space is continuously ventilated to maintain a safe atmosphere; and

(b) the atmosphere is continuously monitored by a competent person.

Personal protective equipment and other control measures

15.11 When purging, ventilating or both cannot bring the atmosphere within a confined space into compliance with clauses 15.10(1)(a) to (c), an employer must ensure that additional control measures are undertaken to protect the safety and health of the worker entering the space, including providing to a worker personal protective equipment appropriate for the conditions in the confined space.

Entry prohibited

15.12 Despite any other provision of this Part, an employer must not require or permit

(a) a worker to enter a confined space if the oxygen content level in the space is above 23%; or

(b) a worker, other than a firefighter responding to an emergency, to enter a

confined space if a concentration of a flammable or explosive substance in the confined space cannot be reduced to less than 10% of its lower explosive limit.

Emergency response - general

15.13 An employer must ensure that

(a) the personal protective and emergency equipment identified under clauses 15.3(d) and (e) - equipment required to undertake rescue operations in the event of an accident or other emergency within a confined space - is readily available at the site of a confined space; and

(b) that, in the event of an accident or other emergency, the emergency response plan and rescue procedures developed under clause 15.2(2)(e) are implemented.

Emergency response - top entry into confined space

15.14(1) When entry into a confined space is from the top, an employer must ensure that, in the event of an accident or other emergency within the space,

(a) the worker entering the confined space and workers carrying out a rescue use a full-body harness and are attached to a lifeline unless another appropriate personal protective equipment system is provided;

(b) where a lifeline is used, the lifeline is attended by a worker who is trained in the emergency response plan and rescue procedures; and

(c) where reasonably practicable, a personal hoisting device is

(i) available to assist with a rescue, and

(ii) located at the entrance to the confined space when a worker is in the confined space.

15.14(2) Despite clause (1)(a), when the use of a full-body harness attached to a lifeline would create an additional risk to the worker in the confined space or would not be reasonably practicable, an employer must ensure that an alternate method of rescue is available to immediately remove a worker from a confined space into which entry is from the top.