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9.1 Definitions

In this Part

"adjacent piping" means a device such as a pipe, line, duct or conduit which is connected to a confined space or is so located as to allow a substance from within the device to enter the confined space;

"blank" means a solid plate installed through the cross-section of a pipe, usually at a flanged connection;

"blanking or blinding" means the absolute closure of adjacent piping, by fastening across its bore a solid plate or cap that completely covers the bore and that is capable of withstanding the maximum pressure of the adjacent piping;

"blind" means a solid plate installed at the end of a pipe which has at that point been physically disconnected from a piping system;

"clean respirable air" when used to describe the atmosphere inside a confined space, means an atmosphere which is equivalent to clean, outdoor air and which contains

(a) about 20.9% oxygen by volume,

(b) no measurable flammable gas or vapour as determined using a combustible gas measuring instrument, and

(c) no air contaminant in concentrations exceeding either 10% of its applicable exposure limit in Part 5 (Chemical Agents and Biological Agents) or an acceptable ambient air quality standard established by an authority having jurisdiction over environmental air standards, whichever is greater;

"confined space", except as otherwise determined by the Board, means an area, other than an underground working, that

(a) is enclosed or partially enclosed,

(b) is not designed or intended for continuous human occupancy,

(c) has limited or restricted means for entry or exit that may complicate the provision of first aid, evacuation, rescue or other emergency response service, and

(d) is large enough and so configured that a worker could enter to perform assigned work;

"disconnecting" means physically disconnecting adjacent piping from a confined space to prevent its contents from entering the space in the event of discharge;

"double block and bleed" means the closure of adjacent piping by locking out a drain or vent in the open position in the line between 2 locked out valves in the closed position;

"harmful substance" means a WHMIS hazardous product, a substance referred to under section 5.48, or a substance which may have a harmful effect on a worker in a confined space;

"high hazard atmosphere" means an atmosphere that may expose a worker to risk of death, incapacitation, injury, acute illness or otherwise impair the ability of the worker to escape unaided from a confined space, in the event of a failure of the ventilation system or respirator;

"inerting" means intentionally flooding the atmosphere inside a confined space with an inert gas such as nitrogen to eliminate the hazard of ignition of flammable vapours inside the confined space but thereby creating an oxygen deficient atmosphere;

"low hazard atmosphere" means an atmosphere which is shown by pre-entry testing or otherwise known to contain clean respirable air immediately prior to entry to a confined space and which is not likely to change during the work activity, as determined by a qualified person after consideration of the design, construction and use of the confined space, the work activities to be performed, and all engineering controls required by this Regulation;

"moderate hazard atmosphere" means an atmosphere that is not clean respirable air but is not likely to impair the ability of the worker to escape unaided from a confined space, in the event of a failure of the ventilation system or respirator.

[Amended by B.C. Reg. 315/2003, effective October 29, 2003.]
[Amended by B.C. Reg. 381/2004, effective January 1, 2005.]
[Amended by B.C. Reg. 30/2015, effective August 4, 2015.]

9.2 Initial determination

The employer must

(a) ensure that each confined space in the workplace is identified, and

(b) determine whether any such space will require entry by a worker, either in scheduled work activities or as a result of foreseeable system failures or other emergencies.

9.3 Prohibited entry

If a confined space exists at a workplace but no worker entry is required, the employer must ensure that each point of access to the confined space is secured against entry or identified by a sign or other effective means which indicates the nature of the hazard and the prohibition of entry, and that workers are instructed not to enter.

9.4 Control of hazards

The employer must ensure that all confined space hazards are eliminated or minimized and that work is performed in a safe manner.

9.5 Confined space entry program

Before a worker is required or permitted to enter a confined space, the employer must prepare and implement a written confined space entry program which includes

(a) an assignment of responsibilities,

(b) a list of each confined space or group of similar spaces and a hazard assessment of those spaces, and

(c) written safe work procedures for entry into and work in the confined space, that address, where applicable

(i) identification and entry permits,

(ii) lockout and isolation,

(iii) verification and testing,

(iv) cleaning, purging, venting or inerting,

(v) ventilation,

(vi) standby persons,

(vii) rescue,

(viii) lifelines, harnesses and lifting equipment,

(ix) personal protective equipment and other precautions, and

(x) coordination of work activities.

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9.6 Administration

The employer must assign overall responsibility for administration of the confined space entry program to a person or persons adequately trained to do so.

9.7 Supervision

(1) The employer must assign responsibility for supervision to a person who is adequately trained to supervise the job before any worker enters a confined space.

(2) The responsible supervisor must ensure that

(a) pre-entry testing and inspection is conducted based on the written procedures,

(b) the precautions identified in the written procedures and the precautions required by this Regulation or which are otherwise necessary for the health and safety of workers are followed, and

(c) only authorized workers enter a confined space.

9.8 Instruction

Each person who is assigned duties or responsibilities related to entry into a confined space must be adequately instructed and trained in

(a) the hazards of the space, and

(b) the precautions identified in written procedures to properly perform their duties.

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9.9 Hazard assessment

(1) A hazard assessment must be conducted for each

(a) confined space, or each group of confined spaces which share similar characteristics, and

(b) work activity, or group of work activities which present similar hazards, to be performed inside a confined space.

(2) The hazard assessment required by subsection (1) must consider

(a) the conditions which may exist prior to entry due to the confined space's design, location or use, or which may develop during work activity inside the space, and

(b) the potential for oxygen enrichment and deficiency, flammable gas, vapour or mist, combustible dust, other hazardous atmospheres, harmful substances requiring lockout and isolation, engulfment and entrapment, and other hazardous conditions.

9.10 Procedures

Written procedures specifying the means to eliminate or minimize all hazards likely to prevail must be developed, based on the hazard assessment required by section 9.9.

9.11 Qualifications

(1) The hazard assessment and written confined space entry procedures must be prepared

(a) by a qualified person who has adequate training and experience in the recognition, evaluation and control of confined space hazards, and

(b) in consultation with the person assigned overall responsibility for administration of the confined space entry program and with the joint committee or the worker health and safety representative, as applicable.

(2) For the purposes of subsection (1)(a) qualifications which are acceptable as evidence of adequate training and experience include

(a) certified industrial hygienist (CIH), registered occupational hygienist (ROH), certified safety professional (CSP), Canadian registered safety professional (CRSP) or professional engineer (P. Eng.), provided that the holders of these qualifications have experience in the recognition, evaluation and control of confined space hazards, or

(b) Repealed. [B.C. Reg. 243/2006, effective January 1, 2007.]

(c) other combination of education, training and experience acceptable to the Board.

[Amended by B.C. Reg. 243/2006, effective January 1, 2007.]

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9.12 Identification

When a confined space requires entry by a worker, each point of access which is not secured against entry must be identified by a sign or other effective means which indicates the hazard and prohibits entry by unauthorized workers.

9.13 When permits required

(1) An entry permit must be completed and signed by the responsible supervisor before a worker enters a confined space

(a) with a high hazard atmosphere,

(b) that requires lockout or isolation procedures to be followed, or

(c) in which there is a hazard of entrapment or engulfment.

(2) An entry permit must be posted at each designated point of entry to a confined space.

(3) Subsection (2) does not apply if

(a) the entry permit is posted at a minimum of one designated point of entry,

(b) the identification at other designated points of entry includes up-to-date information on whether it is safe to enter, and

(c) all workers authorized to enter are informed of the location of posted entry permits.

9.14 Contents of permit

An entry permit must identify the

(a) confined space and the work activities to which it applies,

(b) workers who are inside the space,

(c) required precautions for the space, and

(d) time of expiration of the permit.

9.15 Updating the information

(1) Once issued, the information on an entry permit may only be altered by

(a) the responsible supervisor who signed the permit to update it in accordance with subsection (2) or (3),

(b) the standby worker to update the list of workers inside the confined space, or

(c) the tester to record test results.

(2) An entry permit must be reviewed and updated as necessary to ensure the ongoing safety of the workers inside the space.

(3) The permit must be re-authorized and signed by the responsible supervisor

(a) if there is a change in the work crew,

(b) after each shift change, or

(c) after a change of the responsible supervisor.

(4) Every worker affected must be informed of an alteration of an entry permit regarding a change in the required precautions or work activity.

9.16 Record of permit

A copy of the signed entry permit must be kept for at least one year.

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9.17 Lockout

Before a worker enters a confined space, any material conveyance equipment that transports material to or from the space must be free of material if the material could present a hazard.

[Enacted by B.C. Reg. 312/2003, effective October 29, 2003.]

9.18 Control of harmful substance in adjacent piping

(1) Before a worker enters a confined space where adjacent piping contains a harmful substance that is

(a) a liquid with sufficient volatility to produce a hazardous concentration of an air contaminant, or

(b) a gas or vapour,

the harmful substance in the adjacent piping must be controlled by either disconnecting the adjacent piping or isolating it using blanks or blinds that meet the requirements of section 9.20.

(2) Subject to subsection (3), before a worker enters a confined space where adjacent piping contains a harmful substance that is neither

(a) a liquid with sufficient volatility to produce a hazardous concentration of an air contaminant, nor

(b) a gas or vapour,

the harmful substance in the adjacent piping must be controlled by either disconnecting the adjacent piping or isolating it using blanks or blinds that meet the requirements of section 9.20 or using a double block and bleed system that meets the requirements of section 9.21.

(3) Before a worker enters a confined space where adjacent piping contains a substance that is harmful only because of the temperature, pressure or quantity of the substance, the harmful substance must be controlled

(a) by either disconnecting the adjacent piping or isolating it using blanks or blinds that meet the requirements of section 9.20 or using a double block and bleed system that meets the requirements of section 9.21,

(b) by isolating the adjacent piping in a manner that a professional engineer has certified will make the confined space safe for a worker to carry out the intended work, or

(c) if there is no head pressure in the adjacent piping, by de-energizing and locking out each pressure source for the adjacent piping and depressurizing the adjacent piping.

(4) Where a confined space is

(a) subject to the ingress of gases from a gravity-flow municipal or domestic sanitary sewer system or storm sewer system, and

(b) protected from the ingress of gases by a p-trap,

a worker may enter the confined space only if the atmosphere of the confined space has been tested immediately before entry and the test results confirm that the confined space contains clean respirable air.

(5) If a worker enters a confined space of the type referred to in subsection (4), the following must be undertaken:

(a) the operational integrity of the p-trap must be confirmed immediately on the entry of the worker;

(b) while the worker is inside the confined space, the atmosphere of the confined space must be continuously monitored and confirmed to contain clean respirable air.

[Enacted by B.C. Reg. 312/2010, effective February 1, 2011.]

9.18.1 Exemptions

Repealed. [B.C. Reg. 312/2010, effective February 1, 2011.]

9.19 Isolation points

(1) The employer must keep a record which identifies the location of every isolation point.

(2) Every isolation point must be visually checked or otherwise verified to ensure that the confined space is effectively isolated before a worker enters the space.

9.20 Blanks and blinds

(1) Unless certified by a professional engineer to provide adequate safety for the particular conditions of anticipated pressure, temperature and

service, a blank or blind must be manufactured in accordance with the specifications of one of the following standards:

(a) *ANSI Standard API 590-1985, Steel Line Blanks;*

(b) *ANSI Standard ASME/ANSI B16.5-1988, Pipe Flanges and Flanged Fittings;*

(c) *ANSI Standard ASME B31.1-1992, Power Piping;*

(d) *ANSI Standard ASME B31.3-1993, Chemical Plant and Petroleum Refinery Piping.*

(2) If a blank or blind is certified by a professional engineer, the employer must keep a record of its certification, location and conditions of service.

(3) If required, an allowance for corrosion must be made in the design of a blank or a blind.

(4) A blank or blind must be stamped with or otherwise indicate its pressure rating.

(5) If a line is to be opened for disconnection or to insert a blank or a blind, written safe work procedures must be prepared and followed to prevent hazardous exposure of workers to its contents.

(6) Visual indication that a blank or blind has been installed must be provided at the point of installation.

(7) If required to prevent leakage, gaskets must be installed on the pressure side of blanks or blinds and flanges must be tightened to make the blanks or blinds effective.

(8) If threaded lines are used, threaded plugs or caps must be used to blind the lines.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]

9.21 Double block and bleed

If a double block and bleed isolation system is used

(a) the diameter of the bleed line must be no less than the diameter of the line being isolated, unless certified by a professional engineer,

(b) the bleed for a liquid system must be at a lower elevation than the block valves,

(c) all valves must be locked out in their proper open or closed position,

(d) the downstream block valve must be checked to ensure that it is capable of safely withstanding the line pressure,

(e) the bleed must be checked to ensure that it remains clear of obstructions while the confined space is occupied, either by continuous automatic monitoring or by manually checking within 20 minutes before worker entry, or before re-entry after the confined space has been vacated for more than 20 minutes, and

(f) in the event of discharge from the bleed line resulting from failure of the upstream block valve, all workers must immediately exit the confined space and the space must be effectively re-isolated before a worker enters the space.

9.22 Alternative measures of control or isolation of adjacent piping

(1) Section 9.18 does not apply if

(a) a measure specified in section 9.18 to control or isolate harmful substances contained in adjacent piping from a confined space is not practicable, and

(b) the employer implements alternative measures of control or isolation that are acceptable to the Board.

(2) All workers affected by measures implemented under subsection (1) must be informed of the measures taken and instructed in any applicable work procedures.

[Amended by B.C. Reg. 243/2006, effective January 1, 2007.]
[Amended by B.C. Reg. 312/2010, effective February 1, 2011.]

9.23 Discharge area

The area of potential discharge from a disconnected line or from the bleed of a double block and bleed isolation system must be controlled to ensure that any accidental discharge will not present a hazard to workers.

9.24 Verifying all precautions

Before a worker enters a confined space, pre-entry testing and inspection must be conducted to verify that the required precautions have been effective at controlling the identified hazards and that it is safe for a worker to enter.

9.25 Testing the atmosphere

(1) Except as stated in subsection (7), before a worker enters a confined space, the employer must ensure that the atmosphere in the confined space is tested in accordance with this section and section 9.26.

(2) The pre-entry testing must be

(a) conducted as specified in the written work procedures, and

(b) completed not more than 20 minutes before a worker enters a confined space.

(3) When all workers have vacated the confined space for more than 20 minutes, pre-entry testing, as required by subsection (1), must be repeated.

(4) While a worker is inside a confined space with a moderate or high hazard atmosphere, additional testing must be conducted as necessary to ensure the worker's continuing safety.

(5) Whenever practicable, continuous monitoring of the atmosphere must be done.

(6) If a worker enters a confined space with a moderate or high hazard atmosphere, the employer must continuously monitor the atmosphere if a flammable or explosive atmosphere in excess of 20% of the lower explosive limit could develop.

(7) Pre-entry atmospheric testing is not required in a confined space with a low hazard atmosphere if

(a) the location and control of the space ensures that a more hazardous atmosphere could not inadvertently develop,

(b) such testing is not required to verify the effectiveness of an isolation or other pre-entry control,

(c) prior representative sampling has demonstrated that the atmosphere within the space or group of similar spaces meets the low hazard atmosphere definition, and

(d) the written entry procedures do not require such testing.

[Amended by B.C. Reg. 188/2011, effective February 1, 2012.]

9.26 Procedures and equipment

(1) Repealed. [B.C. Reg. 312/2003, effective October 29, 2003.]

(2) Each confined space test must be carried out by a qualified person who has training and experience to calibrate, operate and monitor testing equipment and interpret readings from the testing equipment.

(3) The test record must show the date and time of the test, the initials of the tester and the levels or condition found.

(4) Test results, other than continuous monitoring results, must be posted without delay at all points of entry to the confined space.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]

[Amended by B.C. Reg. 188/2011, effective February 1, 2012.]

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9.27 Cleaning, purging and venting

(1) When practicable, the employer must ensure that a confined space to be entered contains clean respirable air.

(2) If a confined space is known, or shown by pre-entry testing to contain other than clean respirable air, the hazard must be controlled by cleaning, purging or venting the space and the atmosphere must be retested before a worker enters the space.

(3) The dead-ends of a line that has been isolated must be cleaned, purged or vented to remove any harmful substance which could present a hazard to a worker entering the confined space.

9.28 Risk control

If clean respirable air cannot be assured in a confined space before worker entry, the employer must ensure that

(a) all workers entering the space wear appropriate personal protective equipment including respirators when necessary

(b) the concentrations of flammable gases and vapours are maintained below 20% of the lower explosive limit, and

(c) if flammable or explosive gases, vapours or liquids are present, all sources of ignition are eliminated or adequately controlled.

9.29 Inerting

(1) The employer must notify the Board in writing, and submit a copy of the proposed work procedures, at least 7 days before a worker enters a confined space which has been inerted.

(2) The employer must follow any additional precautions that are prescribed by the Board after review of the notification.

(3) If a confined space has been inerted

(a) all entry precautions for high hazard atmospheres must be followed, except the requirement for continuous ventilation,

(b) every worker entering the confined space must be equipped with a supplied-air respirator meeting the requirements of Part 8 (Personal Protective Clothing and Equipment),

(c) all ignition sources must be controlled, and

(d) the atmosphere inside the confined space must remain inerted while workers are inside.

(4) Subsection (1) does not apply to entry for the purpose of performing emergency rescue duties.

[Amended by B.C. Reg. 312/2010, effective February 1, 2011.]

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9.30 Continuous ventilation

Every confined space must be ventilated continuously while a worker is inside the space, except in

(a) an atmosphere intentionally inerted in accordance with section 9.29,

(b) a low hazard atmosphere controlled in accordance with section 9.31(2), or

(c) an emergency rescue, if ventilation is not practicable.

9.31 Low hazard atmospheres

(1) The employer must ensure that a minimum of 85 m^3/hr (50 cfm) of clean respirable air is supplied for each worker inside a confined space with a low hazard atmosphere, except as permitted in subsection (2).

(2) Continuous ventilation is not required in a confined space which has a low hazard atmosphere, if

(a) the atmosphere is continuously monitored and shown to contain clean respirable air, and

(b) the space has an internal volume greater than 1.8 m^3 (64 cu ft) per occupant, is occupied for less than 15 minutes, and the work inside the space generates no contaminants other than exhaled air.

9.32 Mechanical ventilation

(1) A ventilation system for the control of airborne contaminants in a confined space must be designed, installed and maintained in accordance with established engineering principles and must be specified in the written procedures.

(2) Ventilation equipment must be located and arranged so as to adequately ventilate every occupied area inside the confined space.

(3) If a contaminant is produced in a confined space, it must be controlled at the source by a local exhaust ventilation system if practicable, by general (dilution) ventilation, or by a combination of both.

(4) If practicable, a mechanical ventilation system for a confined space must be sufficient to maintain concentrations of airborne contaminants below the applicable exposure limits.

9.33 Natural ventilation

(1) If natural ventilation is relied upon for the control of airborne contaminants in a confined space, the rate of airflow through the space must be

monitored and must be sufficient to maintain concentrations of airborne contaminants below the applicable exposure limits.

(2) Natural ventilation must not be used

(a) to ventilate a confined space that has a high hazard atmosphere, or

(b) if such ventilation could draw air other than clean respirable air into the confined space.

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9.34 Low hazard atmosphere

If a worker enters a confined space which contains a low hazard atmosphere

(a) another worker must be assigned as a standby person,

(b) there must be a continuous means of summoning the standby person,

(c) the standby person must check on the well-being of workers inside the space at least every 20 minutes, and

(d) the standby person must have a means to immediately summon rescue personnel.

9.35 Moderate hazard atmosphere

If a worker enters a confined space which contains a moderate hazard atmosphere

(a) another worker or workers must be assigned as the standby person(s),

(b) a standby person must be stationed at or near the entrance to the space,

(c) the standby person must visually observe or otherwise check the well-being of the worker(s) inside the space, as often as may be required by the nature of the work to be performed, but at least every 20 minutes,

(d) there must be a continuous means of summoning the standby person from inside the space, and

(e) the standby person must have a means to immediately summon rescue personnel.

9.36 High hazard atmosphere, engulfment or entrapment

If a worker enters a confined space which contains a high hazard atmosphere, a risk of engulfment or entrapment or with any other recognized serious health or safety hazard

(a) another worker or workers must be assigned as the standby person(s),

(b) the standby person(s) must be stationed at the entrance to the space and must continuously attend to the standby duties,

(c) the standby person(s) must visually observe or otherwise continuously monitor the well-being of the worker(s) inside the space,

(d) there must be a continuous means of summoning the standby person(s) from inside the space,

(e) the standby person(s) must be equipped and capable of immediately effecting rescue using lifting equipment if required, or otherwise performing the duties of rescue persons, and

(f) the standby person(s) must prevent the entanglement of lifelines and other equipment.

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9.37 Provision of rescue services

(1) The employer must provide for the services of rescue persons when a worker enters a confined space.

(2) If the rescue persons are employees of another firm, or an agency such as a fire department, there must be a written agreement detailing the services that are to be provided.

9.38 Equipment and training

(1) Every person assigned rescue duties must be properly equipped and adequately trained to carry out such duties.

(2) A practice drill must be conducted at least annually.

(3) Records of training and practice drills must be maintained by the employer of the rescue persons.

9.39 Notification

(1) Before a worker enters a confined space, the responsible supervisor or the standby person must notify rescue personnel of work in the space.

(2) The responsible supervisor or the standby person must notify rescue personnel when all workers have completed their work and exited from the space.

(3) If more than one confined space is to be entered at the same time, notification of rescue personnel to be on alert status at the commencement of work is adequate.

(4) Notification requirements in this section do not apply if the written agreement indicates that rescue personnel are available 24 hours each day.

9.40 Summoning rescue

The employer must ensure that rescue personnel monitor any signalling system that will be used to summon the rescue persons in the event of an emergency whenever they have been informed by the responsible supervisor or the standby person that a confined space entry is in progress.

9.41 Rescue procedures

(1) Rescue or evacuation from a confined space must be directed by a supervisor who is adequately trained in such procedures or a qualified rescue person.

(2) Effective voice communication must be maintained at all times between workers engaged in the rescue or evacuation and the person directing the rescue.

(3) A rescue worker must not enter a confined space unless there is at least one additional worker located outside to render assistance.

(4) A self-contained breathing apparatus, or air supplied respirator with escape bottle, must be used during rescue operations in an unknown or IDLH atmosphere.

Note: Rescue procedures must apply every possible effort to eliminate, control or reduce the risk to emergency personnel responding to emergency situations including the use of mechanical ventilation.

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9.42 When required

(1) When entering a confined space which contains a high hazard atmosphere, a risk of entrapment or engulfment or with any other recognized serious health or safety hazard, the worker must wear a harness of a type which will keep the worker in a position to permit rescue.

(2) A lifeline must be attached to the harness and be tended at all times by a standby person stationed outside the entrance to the space.

(3) The standby person must be equipped with suitable lifting equipment if necessary to permit rescue.

(4) The use of a lifeline is not required if the risk assessment identifies obstructions or other conditions that make its use impractical or unsafe.

9.43 Standards

Harnesses, lifelines and lifting equipment must meet the requirements of standards acceptable under this Regulation.

9.44 Line entanglement

If one or more workers enter a confined space, provision must be made to prevent the entanglement of lifelines and other equipment.

9.45 Additional workers

If rescue cannot be effected by the standby person(s) using harnesses, lifelines and lifting equipment, then one or more additional workers must be stationed at the entrance to the confined space and these workers must be equipped and capable of entering the space and effecting rescue.

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9.46 Personal protective equipment

Repealed. [B.C. Reg. 312/2003, effective October 29, 2003.]

9.47 Emergency escape respirator

Workers entering a confined space which contains a high hazard atmosphere must carry on their person or have within arm's reach an emergency escape respirator sufficient to permit them to leave the confined space without assistance.

9.48 Compressed gas cylinders

A cylinder of compressed gas is not permitted inside a confined space, except for a cylinder of compressed air supplied to a respirator, medical resuscitation equipment, handheld aerosol spray containers, fire extinguishers, or other equipment permitted by the Board.

[Enacted by B.C. Reg. 253/2001, effective January 28, 2002.]

9.49 Torches and hoses

When practicable, torches and hoses used for welding, brazing or cutting must be removed from a confined space when not in use and when the confined space is vacated.

[Amended by B.C. Reg. 253/2001, effective January 28, 2002.]

Note: It may be impracticable to remove hoses for some short duration breaks of 60 minutes or less, particularly where the confined space is large or where the removal of hoses may create some risk to workers, for example, when hoses are removed from scaffolding. If removal is impracticable, alternate measures must be adopted under sections 9.4 and 9.5. The preferred method in most cases is to disconnect at source with safe venting procedures together with procedures to ensure no inadvertent reconnection while workers are on the break or, if this is not practicable, closing and putting a tag on connections located outside the confined space. Other applicable requirements in Part 9 must also be followed including those on ventilation, standby persons and retesting prior to re-entry. For further information, see the OHS Guideline on section 9.49 at www.worksafebc.com.

9.50 Electrical equipment

(1) Electrical tools and equipment used in a confined space must be grounded or double-insulated and so marked, and if wet or damp conditions exist inside the space, must be protected by an approved ground fault circuit interrupter as required by Part 19 (Electrical Safety).

(2) Electrical tools and equipment used in a confined space where flammable or explosive gases, vapours or liquids are present must be CSA approved for hazardous locations classified under *CSA Standard C22.1-94, Canadian Electrical Code Part 1*, as Class 1, Division 2, Groups A, B and C.

9.51 Non-sparking tools

Only non-sparking tools may be used in a confined space where flammable or explosive gases, vapours or liquids are present.