

# **Canada Occupational Safety and Health Regulations ( L-2 -- SOR/86-304 )**

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## **Canada Occupational Safety and Health Regulations**

SOR/86-304

### **CANADA LABOUR CODE**

#### **Canada Occupational Safety and Health Regulations**

#### **REGULATIONS RESPECTING OCCUPATIONAL SAFETY AND HEALTH MADE UNDER PART II OF THE CANADA LABOUR CODE**

[SOR/94-263, s. 1]

#### **PART I**

#### **SHORT TITLE**

**1.1** These Regulations may be cited as the *Canada Occupational Safety and Health Regulations*. SOR/94-263, s. 2(F).

*Interpretation*

## 1.2 In these Regulations,

"Act" means Part II of the *Canada Labour Code*; (*Loi*)

"ANSI" means the American National Standards Institute; (*ANSI*)

"approved organization" means an organization that is approved by the Minister under section 16.12 for the teaching of first aid; (*organisme agréé*)

"basic first aid certificate" means the certificate issued by an approved organization for successful completion of a one day first aid course; (*certificat de secourisme élémentaire*)

"change room" means a room that is used by employees to change from their street clothes to their work clothes and from their work clothes to their street clothes, and includes a locker room; (*vestiaire*)

"CSA" means the Canadian Standards Association; (*ACNOR*)

"dangerous substance" [Repealed, SOR/88-68, s. 1]

"elevating device" means an escalator, elevator or other device for moving passengers or freight; (*appareil élévateur*)

"fire hazard area" means an area that contains or is likely to contain explosive or flammable concentrations of hazardous substances; (*endroit présentant un risque d'incendie*)

"first aid room" means a room that complies with the requirements of section 16.10; (*salle de premiers soins*)

"high voltage" means a voltage of 751 volts or more between any two conductors or between a conductor and ground; (*haute tension*)

"locked out" means, in respect of any equipment, machine or device, that the equipment, machine or device has been rendered inoperative and cannot be operated or energized without the consent of the person who rendered it inoperative; (*verrouillé*)

"lower explosive limit" means the lower limit of flammability of a chemical agent or a combination of chemical agents at ambient temperature and pressure, expressed

(a) for a gas or vapour, as a percentage in air by volume, and

(b) for dust, as the weight of dust per volume of air; (*limite explosive inférieure*)

"medical practitioner" [Repealed, SOR/88-68, s. 1]

"Minister" means the Minister of Labour; (*ministre*)

"National Building Code" means the *National Building Code of Canada, 1995*, issued by the Canadian Commission on Building and Fire Codes, National Research Council of Canada, dated 1995, as amended from time to time; (*Code canadien du bâtiment*)

"National Fire Code" means the *National Fire Code of Canada 1995*, issued by the Canadian Commission on Building and Fire Codes, National Research Council of Canada, dated 1995, as amended from time to time; (*Code national de prévention des incendies du Canada*)

"oxygen deficient atmosphere" means an atmosphere in which there is less than 18 per cent by volume of oxygen at a pressure of one atmosphere or in which the partial pressure of oxygen is less than 135 mm Hg; (*air à faible teneur en oxygène*)

"personal service room" means a change room, toilet room, shower room, lunch room, living space, sleeping quarters or a combination thereof; (*local réservé aux soins personnels*)

"protection equipment" means safety materials, equipment, devices and clothing; (*équipement de protection*)

"qualified person" means, in respect of a specified duty, a person who, because of his knowledge, training and experience, is qualified to perform that duty safely and properly; (*personne qualifiée*)

"regional office" means, in respect of a work place, the regional office of the Department of Labour for the administrative region of that Department in which the work place is situated; (*bureau régional*)

"toilet room" means a room that contains a toilet or a urinal, but does not include an outdoor privy. (*lieux d'aisances*) SOR/88-68, ss. 1, 14; SOR/88-632, s. 1(F); SOR/94-33, s. 1; SOR/94-263, s. 3; SOR/96-294, s. 1; SOR/2000-328, s. 1; SOR/2000-374, s. 1.

### *Prescription*

**1.3** These Regulations are prescribed for the purposes of sections 125, 125.1, 125.2 and 126 of the Act. SOR/88-68, s. 2; SOR/94-263, s. 4.

## *Application*

**1.4** These Regulations do not apply in respect of employees employed

(a) on trains while in operation;

(b) on aircraft while in operation;

(c) on ships;

(d) subject to Part II of the *Oil and Gas Occupational Safety and Health Regulations*, on or in connection with exploration or drilling for or the production, conservation, processing or transportation of oil or gas in Canada lands, as defined in the *Canada Petroleum Resources Act*; or

(e) on or in connection with a work or undertaking that is excluded from the application of the Act by an order made pursuant to section 123.1 of the Act. SOR/87-623, s. 1; SOR/94-263, s. 5.

## *Records and Reports*

**1.5** Where an employer is required by section 125 or 125.1 of the Act to keep and maintain a record, report or other document, the employer shall keep and maintain the record, report or other document in such a manner that it is readily available for examination by a safety officer and by the safety and health committee or the safety and health representative, if either exists, for the work place to which it applies. SOR/88-68, s. 3; SOR/94-263, s. 6.

## *Inconsistent Provisions*

**1.6** In the event of an inconsistency between any standard incorporated by reference in these Regulations and any other provision of these Regulations, that other provision shall prevail to the extent of the inconsistency.

**1.7** Notwithstanding any provision in any standard incorporated by reference in these Regulations, a reference to another publication in that standard is a reference to the publication as it read on March 31, 1986.

## *Alternate Media*

**1.8 (1)** In this section,

"alternate media" means any method of communication that permits an employee with a special need to receive any information, instruction or training required by these Regulations to be provided, including braille, large print, audio tape, computer disc, sign language and verbal communications; (*média substitut*)

"highly visible" means marked with brightly coloured paint, painted with a reflective coating or marked by other means so as to be readily apparent; (*très visible*)

"special need" means a condition that impairs an employee's ability to receive any information, instruction or training that is required by these Regulations to be provided. (*besoins spéciaux*)

(2) Subject to subsection (5), where an employer or other person is required by these Regulations to give, provide or make available any information, instruction or training to an employee and the employee has a special need, the employer or other person shall give, provide or make available the information, instruction or training to the employee by means of an alternate medium.

(3) Where information, including warnings, is required by these Regulations to be provided by means of a sign or marking, the alternate medium shall be visible or audible to an employee with a special need.

(4) Where a warning is required to be given by a means other than a sign or marking, the warning shall be given to an employee with a special need in a manner that effectively warns the employee of the nature of the danger.

(5) Where an employer or other person is required by these Regulations to give, provide or make available any information by means of labels, defect tags or lockout tags, the employer or other person need not provide the information by means of an alternate medium on the labels, defect tags or lockout tags. SOR/96-525, s. 1.

## PART II PERMANENT STRUCTURES

### *Interpretation*

**2.1** The definitions in this section apply in this Part.

"ASHRAE" means the American Society of Heating, Refrigerating and Air-Conditioning Engineers. (*ASHRAE*)

"building" means a structure that is used or intended for supporting or sheltering any use or occupancy, and includes a grain-handling facility, a tower, an antenna and an antenna-supporting structure. (*bâtiment*)

"floor hole" means an opening in a floor or platform that measures less than 300 mm but more than 50 mm in its smallest dimension. (*trou dans le plancher*)

"floor opening" means an opening in a floor, platform, pavement or yard that measures 300 mm or more in its smallest dimension. (*ouverture dans le plancher*)

"grain-handling facility" means a structure that is constructed, installed or established to handle, store or process grain or grain products, and includes an elevator as defined in section 2 of the *Canada Grain Act*. (*installation de manutention des grains*)

"HVAC system" means a heating, ventilating and air conditioning system that is installed in a building, and includes all of its equipment and components. (*système CVCA*)

"wall opening" means an opening in a wall or partition that measures at least 750 mm in height and 300 mm in width. (*ouverture dans un mur*) SOR/94-263, s. 7; SOR/2000-374, s. 2.

## DIVISION I BUILDINGS

### Standards

**2.2** (1) The design and construction of every building, the construction of which begins on or after the day of the coming into force of this subsection, shall meet the requirements of the National Building Code.

(2) Every building, the construction of which begins before the day of the coming into force of this subsection, shall, to the extent reasonably practicable, meet the requirements of the National Building Code.

(3) The renovation of any building or part of a building shall, to the extent reasonably practicable, meet the requirements of the National Building Code.

(4) Where it is not reasonably practicable for an employer to comply with the requirements of

subsection (3), the employer shall, before the proposed renovations start, notify the safety and health committee, or safety and health representative. SOR/88-632, s. 2(F); SOR/96-525, s. 2; SOR/2000-374, s. 2.

## Doors

**2.3** (1) Every double-action swinging door that is located in an exit, entrance or passageway used for two-way pedestrian traffic or traffic involving wheelchairs or other similar devices shall be designed and fitted in a manner that will allow persons who are approaching from one side of the door to be aware of persons who are on the other side of it.

(2) The area of every passageway into which a door or gate extends when open, other than the door of a closet or other small unoccupied storage room, shall be marked, in consultation with the safety and health committee or safety and health representative in a manner that clearly indicates the area of hazard created by the opening of the door or gate.

(3) Where a door or gate that is to remain open extends into a passageway for a distance that will reduce the effective width of the passageway to a width less than that required by the National Building Code,

(a) an attendant shall be posted near the open door or gate; or

(b) a highly visible barricade shall be placed across the passageway before the door or gate is opened to prevent persons from using the passageway while the door or gate is open. SOR/88-632, s. 3(F); SOR/2000-374, s. 2.

## Clearances

**2.4** A window awning or canopy or any part of a building that projects over an exterior passageway shall be installed or constructed in a manner that allows a clearance of not less than 2.2 m between the passageway surface and the lowest projection of the awning or canopy or projecting part of the building. SOR/96-525, s. 3; SOR/2000-374, s. 2.

## Floor and Wall Openings

**2.5** (1) Where an employee has access to a wall opening from which there is a drop of more than 1.2 m or to a floor opening, highly visible guardrails shall be fitted around the wall opening or floor opening or it shall be covered with material capable of supporting all loads that may be brought to bear on it.

(2) The material shall be securely fastened to and supported by structural members.

(3) Subsection (1) does not apply to vehicle maintenance pits or to the loading and unloading areas of truck, railroad or marine docks the edges of which are marked in a highly visible manner.

(4) Where a pit is used for the maintenance of vehicles, including railway rolling stock, the hazard it represents shall be clearly identified and its perimeter shall be delineated by highly visible markings. SOR/88-632, s. 4(F); SOR/96-525, s. 4; SOR/2000-374, s. 2.

## Open-top Bins, Hoppers, Vats and Pits

**2.6** (1) Where an employee has access to an open-top bin, hopper, vat, pit or other open-top enclosure from a point directly above the enclosure, the enclosure shall be

(a) covered with a grating, screen or other covering that will prevent the employee from falling into the enclosure; or

(b) provided with a walkway that is not less than 500 mm wide and is fitted with highly visible guardrails.

(2) The grating, screen, covering or walkway shall be designed, constructed and maintained so that it will support a load that is not less than the greater of

(a) the maximum load that may be brought to bear on it, and

(b) a live load of 6 kPa.

(3) Where an employee is working above an open-top bin, hopper, vat, pit or other open-top enclosure that is not covered with a grating, screen or other covering, the inside wall of the enclosure shall be fitted with a fixed ladder, except where the operations carried on in the enclosure make such a fitting impracticable.

(4) Every enclosure referred to in subsection (1) whose walls extend less than 1.1 m above an adjacent floor or platform used by employees shall be

(a) covered with a grating, screen or other covering;

(b) fitted with a highly visible guardrail; or

(c) guarded by a person in order to prevent employees from falling into the enclosure. SOR/2000-374, s. 2.

## Ladders, Stairways and Ramps



**2.7** Where an employee is required to move from one level to another that is more than 450 mm higher or lower than the first level, the employer shall install a fixed ladder, stairway or ramp between the levels. SOR/96-525, s. 5; SOR/2000-374, s. 2.

**2.8** Where one end of a stairway is so close to a traffic route used by vehicles, to a machine or to any other hazard as to be hazardous to the safety of an employee using the stairway, the employer shall, at that end of the stairway,

(a) post a sign to warn employees of the hazard; and

(b) where practicable, install a highly visible barricade that will protect employees using the stairway from the hazard. SOR/96-525, s. 6; SOR/2000-374, s. 2.

**2.9 (1)** A fixed ladder installed after the day of the coming into force of this section shall be designed, constructed and installed in accordance with the requirements of ANSI Standard A14.3-1984 entitled *American National Standard for Ladders -- Fixed -- Safety Requirements*, as amended from time to time, other than section 7 of that Standard.

(2) A fixed ladder that is installed before the day of the coming into force of this section shall, where reasonably practicable, meet the requirements referred to in subsection (1).

(3) No employee shall carry tools or materials while climbing a fixed ladder unless the tools or materials are carried in a safe manner.

(4) A fixed ladder shall be highly visible or its presence otherwise brought to the attention of any employee in the area. SOR/2000-374, s. 2.

**2.10 (1)** Every grain-handling facility that has a manlift or ladder that provides access to a floor or roof over a grain bin or silo shall, in addition to its primary exit, have a secondary exit from the floor or roof that consists of an exterior fixed ladder constructed in accordance with the requirements referred to in subsection 2.9(1).

(2) A fixed ladder that is installed in a grain-handling facility before the day of the coming into force of this section shall, where reasonably practicable, meet the requirements referred to in subsection 2.9(1).

(3) A fixed ladder that is installed adjacent to a manlift and that is intended for emergency exit from the manlift shall meet the requirements of section 5.1.9 of CSA Standard B 311-M1979, entitled *Safety Code for Manlifts*, the English version of which is dated October 1979 and the French version of which is dated July 1984. SOR/96-525, s. 7; SOR/2000-374, s. 2.

## Docks, Ramps and Dock Plates

**2.11** (1) Every loading and unloading dock and ramp shall be

(a) of sufficient strength to support the maximum load that may be brought to bear on it;

(b) free of surface irregularities that may interfere with the safe operation of mobile equipment; and

(c) fitted around its sides that are not used for loading or unloading with side rails, curbs or rolled edges of sufficient height and strength to prevent mobile equipment from running over the edge.

(2) Cross-traffic on dock levellers shall be limited to the portion of the dock leveller where there is no danger of tipping the materials handling equipment.

(3) Every portable ramp and every dock plate shall be

(a) clearly marked or tagged to indicate the maximum safe load that it is capable of supporting; and

(b) installed so that it cannot slide, move or otherwise be displaced under the load that may be brought to bear on it. SOR/2000-374, s. 2.

## Guardrails

**2.12** (1) Every guardrail shall be highly visible and consist of

(a) a horizontal top rail not less than 900 mm but not more than 1 100 mm above the base of the guardrail;

(b) a horizontal intermediate rail spaced midway between the top rail and the base; and

(c) supporting posts spaced not more than 3 m apart at their centres.

(2) Every guardrail shall be designed to withstand a static load of 890 N applied in any direction at any point on the top rail. SOR/94-263, s. 8(F); SOR/2000-374, s. 2.

## Toe Boards

**2.13** Where there is a hazard that tools or other objects may fall onto a person from a platform or other raised area, or through a floor opening or floor hole,

(a) a toe board that extends from the floor of the platform or other raised area to a height of not less than 125 mm shall be installed; or

(b) if the tools or other objects are piled to such a height that a toe board would not prevent the tools or other objects from falling, a solid or mesh panel shall be installed from the floor to a height of not less than 450 mm. SOR/2000-374, s. 2.

## Housekeeping and Maintenance

**2.14** (1) Every exterior stairway, walkway, ramp and passageway that may be used by employees shall be kept free of accumulations of ice and snow or other slipping or tripping hazards.

(2) All dust, dirt, waste and scrap material in every work place in a building shall be removed as often as is necessary to protect the safety and health of employees and shall be disposed of in such a manner that the safety and health of employees is not endangered.

(3) Every travelled surface in a work place shall be

(a) slip resistant; and

(b) kept free of splinters, holes, loose boards and tiles and similar defects. SOR/2000-374, s. 2.

**2.15** Where a floor in a work place is normally wet and employees in the work place do not use non-slip waterproof footwear, the floor shall be covered with a dry false floor or platform or treated with a non-slip material or substance. SOR/88-632, s. 5(F); SOR/96-525, s. 8; SOR/2000-374, s. 2.

**2.16** (1) The cleaning of a window on any level above the ground floor level of a building the construction of which begins on or after the day of the coming into force of this subsection shall be done in accordance with the requirements of CSA Standard CAN/CSA-Z91-M90, entitled *Safety Code for Window Cleaning Operations*, as amended from time to time.

(2) To the extent reasonably practicable, the cleaning of a window on any level above the ground floor level of a building the construction of which began before the day of the coming into force of this subsection shall be done in accordance with the requirements referred to in subsection (1).

(3) Subsections (4) to (8) apply to buildings whose owners are employers as defined in subsection 122(1) of the Act.

(4) The employer shall, in respect of buildings the construction of which begins on or after the day of the coming into force of this subsection, ensure that a qualified person inspects the anchor points and permanently installed suspended platforms used for window cleaning and that they meet the requirements referred to in subsection (1).

(5) The employer shall, in respect of buildings the construction of which began before the day of the coming into force of this subsection, ensure that a qualified person inspects the anchor points and permanently installed suspended platforms used for window cleaning and that they meet the requirements of CSA Standard Z91-M1980, entitled *Safety Code for Window Cleaning Operations*, the English version of which is dated May 1980 and the French version of which is dated November 1983.

(6) The inspection of anchor points and permanently installed suspended platforms shall be done

(a) before they are used for the first time;

(b) as often as necessary, but at least as often as recommended by their manufacturer;

(c) whenever they are reported as being defective; and

(d) in every case, at least once a year.

(7) Immediately on completion of an inspection, the qualified person shall, in a written, signed and dated report, inform the employer of any defects or hazardous conditions detected in the anchor points or permanently installed suspended platforms.

(8) The employer shall

(a) ensure that any reported defect in the anchor points or permanently installed suspended platforms is repaired before they are used;

(b) ensure that any maintenance and repairs are performed in accordance with the manufacturer's recommendations;

(c) keep, for a period of two years, a record of any inspection and maintenance, including the date the inspection or maintenance was carried out and the name of the person who did it; and

(d) keep, for as long as the anchor points and permanently installed suspended platforms are used, a record of the modifications or repairs made to them, including the day the work was done and the name of the person who did it. SOR/2000-374, s. 2.

## Temporary Heating

**2.17** (1) Subject to subsection (2), where a high-capacity portable open-flame heating device is used in an enclosed work place, the heating device shall

- (a) be located, protected and used so that there is no hazard of igniting tarpaulins, wood or other combustible materials near the heating device;
- (b) be used only when there is ventilation provided;
- (c) be located so as to be protected from accidental contact, damage or overturning; and
- (d) not restrict a means of exit.

(2) Where the heating device does not provide complete combustion of the fuel used in connection with it, it shall be equipped with an exhaust system that discharges the products of combustion outside the enclosed work place. SOR/2000-374, s. 2.

## DIVISION II

### TOWERS, ANTENNAS AND ANTENNA-SUPPORTING STRUCTURES

**2.18** (1) No employee shall climb a tower, an antenna or an antenna-supporting structure unless

- (a) the employer has authorized the employee to do so;
- (b) the employee has been trained and instructed in a safe method of climbing; and
- (c) the employer has provided a fall-protection system in accordance with section 12.10.

(2) No employee shall climb or work on a tower, an antenna or an antenna-supporting structure

(a) when weather conditions are likely to be hazardous to the safety or health of the employee, except when the work is required to remove a hazard or to rescue an employee; or

(b) if the physical condition of the tower, antenna or antenna-supporting structure is likely to be hazardous to the safety or health of the employee. SOR/2000-374, s. 2.

**2.19** Where reasonably practicable, the design and construction of every tower, antenna and antenna-supporting structure the construction of which begins on or after the day of the coming

into force of this section shall meet the requirements of CSA Standard CAN/CSA-S37-94, entitled *Antennas, Towers, and Antenna-Supporting Structures*, as amended from time to time. SOR/2000-374, s. 2.

## DIVISION III HVAC SYSTEMS

### Application

**2.20** (1) Sections 2.21 to 2.24 apply to buildings whose owner or principal tenant is an employer as defined in subsection 122(1) of the Act.

(2) Despite subsection (1), where the employer is not the principal tenant in the building but occupies a portion of the building in which there is an HVAC system over which the employer has control, sections 2.21 to 2.24 apply to that portion of the building. SOR/2000-374, s. 2.

### Standards

**2.21** Subject to section 2.22, every HVAC system installed on or after the day of the coming into force of this section shall meet the design requirements of ASHRAE Standard 62-1989, entitled *Ventilation for Acceptable Indoor Air Quality*, as amended from time to time. SOR/2000-374, s. 2.

**2.22** To the extent reasonably practicable, the relevant portion of an HVAC system shall be modified to meet the design requirements referred to in section 2.21 if

(a) the level of occupancy in a building or portion of a building exceeds the level for which the HVAC system was designed; or

(b) the use of a building or portion of a building differs from the use for which the HVAC system was designed. SOR/2000-374, s. 2.

### Records

**2.23** (1) For HVAC systems installed on or after the day of the coming into force of this section, the employer shall keep a record of the information required by section A-2.3.5.2 of Appendix A of the National Building Code and make the record readily available.

(2) In addition to the record required by subsection (1), the employer shall keep and make readily available a record of the normal hours of occupancy and the types of activities of the

occupants of the building.

(3) In the case of HVAC systems to which subsection (1) does not apply, the employer shall keep and make readily available all records required by subsections (1) and (2) that are reasonably practicable to keep. SOR/2000-374, s. 2.

## Operation, Inspection, Testing, Cleaning and Maintenance

**2.24** (1) Every employer shall appoint a qualified person to set out, in writing, instructions for the operation, inspection, testing, cleaning and maintenance of an HVAC system and the calibration of probes or sensors on which the system relies.

(2) The instructions shall

(a) take into account CSA Guideline Z204-94, entitled *Guideline for Managing Air Quality in Office Buildings*, dated June 1994;

(b) where they exist on the day that this section comes into force, be readily available;

(c) where they do not exist on the day that this section comes into force, be developed and made readily available as soon as possible and, in any event, no later than five years after that day;

(d) for buildings the construction of which is completed on or after the day of the coming into force of this section, be readily available as soon as possible and, in any event, no later than five years after the day of the coming into force of this section;

(e) specify the manner of operation of the HVAC system;

(f) specify the nature and frequency of inspections, testing, cleaning and maintenance; and

(g) be reviewed by a qualified person and amended

(i) when modifications to the HVAC system are carried out in accordance with section 2.22,

(ii) when the standard referred to in section 2.21 is amended,

(iii) when an investigation carried out in accordance with section 2.27 has identified that a safety or health hazard exists, or

(iv) at least every five years.

(3) Despite paragraph (2)(c), if an investigation referred to in section 2.27 identifies that a safety or health hazard exists, the instructions shall be developed and made readily available without delay.

(4) The employer shall appoint a qualified person or persons to implement the instructions and make a report, in writing, of each inspection, testing, cleaning and maintenance operation.

(5) The report shall be kept readily available by the employer for a period of at least five years and shall

(a) specify the date and type of work performed, and the identity of the person who performed it;

(b) identify the components of the HVAC system or portion of an HVAC system involved; and

(c) record test results, any deficiencies observed and the actions taken to correct them.  
SOR/2000-374, s. 2.

**2.25** An employer shall ensure that the qualified person or persons referred to in subsection 2.24(4) are instructed and trained in the specific procedures to be followed in the operation, inspection, testing, cleaning and maintenance of the HVAC system and the calibration of probes or sensors on which the system relies. SOR/2000-374, s. 2.

**2.26** An employer shall post, in a place readily accessible to every employee, the telephone number of a contact person to whom safety or health concerns regarding the indoor air quality in the work place can be directed. SOR/2000-374, s. 2.

## Investigations

**2.27** (1) Every employer shall develop, or appoint a qualified person to develop, a procedure for investigating situations in which the safety or health of an employee in the work place is or may be endangered by the air quality.

(2) The procedure shall include the following steps:

(a) a review of the nature and number of safety or health complaints;

(b) a visual inspection of the work place;

(c) the inspection of the HVAC system for cleanliness, operation and performance;



- (d) a review of the maintenance schedule for the HVAC system;
- (e) the assessment of building use as compared to the use for which it was designed;
- (f) the assessment of actual level of occupancy as compared to the level for which the building was designed;
- (g) the determination of potential sources of contaminants;
- (h) the determination of levels of carbon dioxide, carbon monoxide, temperature, humidity and air motion, where necessary;
- (i) the specification, where necessary, of tests to be conducted to determine levels of formaldehyde, particulates, airborne fungi and volatile organic compounds; and
- (j) the identification of the standards or guidelines to be used in evaluating test results.

(3) In developing the procedure, the employer or the qualified person appointed by the employer shall take into account the Department of Health publication 93-EHD-166, entitled *Indoor Air Quality in Office Buildings: A Technical Guide*.

(4) Where the safety or health of an employee in a work place is or may be endangered by the air quality, the employer shall, without delay, appoint a qualified person to carry out an investigation in accordance with the procedure developed pursuant to subsection (1).

(5) The investigation shall be carried out in consultation with the safety and health committee or safety and health representative.

(6) To the extent reasonably practicable, the employer shall, in consultation with the safety and health committee or safety and health representative remove or control any safety or health hazard that is identified in the course of the investigation.

(7) Every employer shall keep the records of every indoor air quality complaint and investigation for at least five years. SOR/2000-374, s. 2.

### PART III TEMPORARY STRUCTURES AND EXCAVATIONS

#### *Application*

**3.1** This Part applies to portable ladders, temporary ramps and stairs, temporary elevated work bases used by employees and temporary elevated platforms used for materials.

### *General*

**3.2** No employee shall use a temporary structure where it is reasonably practicable to use a permanent structure. SOR/94-263, s. 9(F).

**3.3** No employee shall work on a temporary structure in rain, snow, hail or an electrical or wind storm that is likely to be hazardous to the safety or health of the employee, except where the work is required to remove a hazard or to rescue an employee.

**3.4** Tools, equipment and materials used on a temporary structure shall be arranged or secured in such a manner that they cannot be knocked off the structure accidentally. SOR/88-632, s. 6(F).

**3.5** No employee shall use a temporary structure unless

(a) he has authority from his employer to use it; and

(b) he has been trained and instructed in its safe and proper use.

**3.6** (1) Prior to a work shift, a qualified person shall make a visual safety inspection of every temporary structure to be used during that shift.

(2) Where an inspection made in accordance with subsection (1) reveals a defect or condition that adversely affects the structural integrity of a temporary structure, no employee shall use the temporary structure until the defect or condition is remedied.

### *Barricades*

**3.7** Where a person or a vehicle may come into contact with a temporary structure, a person shall be positioned at the base of the temporary structure or a highly visible barricade shall be installed around it to prevent any such contact. SOR/96-525, s. 9.

### *Guardrails and Toe Boards*

**3.8** (1) Guardrails and toe boards shall be installed at every open edge of a platform of a temporary structure.

(2) The guardrails and toe boards referred to in subsection (1) shall meet the standards set out in sections 2.12 and 2.13. SOR/2000-374, s. 3.

### *Temporary Stairs, Ramps and Platforms*

**3.9** (1) Subject to subsection 3.10(3), temporary stairs, ramps and platforms shall be designed, constructed and maintained to support any load that is likely to be imposed on them and to allow safe passage of persons and equipment on them.

(2) Temporary stairs shall have

(a) uniform steps in the same flight;

(b) a slope not exceeding 1.2 in 1; and

(c) a hand-rail that is not less than 900 mm and not more than 1 100 mm above the stair level on open sides including landings.

(3) Temporary ramps and platforms shall be

(a) securely fastened in place;

(b) braced if necessary to ensure their stability; and

(c) provided with cleats or surfaced in a manner that provides a safe footing for employees.

(4) A temporary ramp shall be so constructed that its slope does not exceed

(a) where the temporary ramp is installed in the stairwell of a building not exceeding two storeys in height, 1 in 1, if cross cleats are provided at regular intervals not exceeding 300 mm; and

(b) in any other case, 1 in 3.

### *Scaffolds*

**3.10** (1) The erection, use, dismantling or removal of a scaffold shall be carried out by or under the supervision of a qualified person.

(2) The footings and supports of every scaffold shall be capable of carrying, without dangerous

settling, all loads that are likely to be imposed on them.

(3) Every scaffold shall be capable of supporting at least four times the load that is likely to be imposed on it.

(4) The platform of every scaffold shall be at least 480 mm wide and securely fastened in place.

### *Portable Ladders*

**3.11** (1) Commercially manufactured portable ladders shall meet the standards set out in CSA Standard CAN3-Z11-M81, Portable Ladders, the English version of which is dated September, 1981, as amended to March, 1983 and the French version of which is dated August, 1982, as amended to June, 1983.

(2) Subject to subsection (3), every portable ladder shall, while being used,

(a) be placed on a firm footing; and

(b) be secured in such a manner that it cannot be dislodged accidentally from its position.

(3) Where, because of the nature of the location or of the work being done, a portable ladder cannot be securely fastened in place, it shall, while being used, be sloped so that the base of the ladder is not less than one-quarter and not more than one-third of the length of the ladder from a point directly below the top of the ladder and at the same level as the base.

(4) Every portable ladder that provides access from one level to another shall extend at least three rungs above the higher level.

(5) Metal or wire-bound portable ladders shall not be used where there is a hazard that they may come into contact with any live electrical circuit or equipment.

(6) No employee shall work from any of the three top rungs of any single or extension portable ladder or from either of the two top steps of any portable step ladder. SOR/88-632, s. 7(F).

### *Excavation*

**3.12** (1) Before the commencement of work on a tunnel, excavation or trench, the employer shall mark the location of all underground pipes, cables and conduits in the area where the work is to be done.

(2) Where an excavation or trench constitutes a hazard to employees, a highly visible barricade

shall be installed around it.

(3) In a tunnel or in an excavation or trench that is more than 1.4 m deep and whose sides are sloped at an angle of 45° or more to the horizontal

(a) the walls of the tunnel, excavation or trench, and

(b) the roof of the tunnel

shall be supported by shoring and bracing that is installed as the tunnel, excavation or trench is being excavated.

(4) Subsection (3) does not apply in respect of a trench where the employer provides a system of shoring composed of steel plates and bracing, welded or bolted together, that can support the walls of the trench from the ground level to the trench bottom and can be moved along as work progresses.

(5) The installation and removal of the shoring and bracing referred to in subsection (3) shall be performed or supervised by a qualified person.

(6) Tools, machinery, timber, excavated materials or other objects shall not be placed within 1 m from the edge of an excavation or trench. SOR/96-525, s. 10.

### *Safety Nets*

**3.13** (1) Where there is a hazard that tools, equipment or materials may fall onto or from a temporary structure, the employer shall provide a protective structure or a safety net to protect from injury any employee on or below the temporary structure.

(2) The design, construction and installation of a safety net referred to in subsection (1) shall meet the standards set out in ANSI Standard ANSI A10.11-1979, American National Standard for Safety Nets Used During Construction, Repair and Demolition Operations, dated August 7, 1979.

### *Housekeeping*

**3.14** Every platform, hand-rail, guardrail and work area on a temporary structure used by an employee shall be kept free of accumulations of ice and snow while the temporary structure is in use.

**3.15** The floor of a temporary structure used by an employee shall be kept free of grease, oil or

other slippery substance and of any material or object that may cause an employee to trip.

## PART IV ELEVATING DEVICES

### *Application*

**4.1** This Part does not apply to elevating devices used in the underground workings of mines.

### *Standards*

**4.2** (1) Every elevating device and every safety device attached thereto shall

(a) meet the standards set out in the applicable CSA standard referred to in subsection (2) in so far as is reasonably practicable; and

(b) be used, operated and maintained in accordance with the standards set out in the applicable CSA standard referred to in subsection (2).

(2) For the purposes of subsection (1), the applicable CSA standard for

(a) elevators, dumbwaiters, escalators and moving walks is CSA Standard CAN3-B44-M85, Safety Code for Elevators, other than clause 9.1.4 thereof, the English version of which is dated November 1985 and the French version of which is dated March 1986;

(b) manlifts is CSA Standard B311-M1979, Safety Code for Manlifts, the English version of which is dated October, 1979 and the French version of which is dated July, 1984 and Supplement No. 1-1984 to B311-M1979, the English version of which is dated June, 1984 and the French version of which is dated August, 1984; and

(c) elevating devices for the handicapped is CSA Standard CAN3-B355-M81, Safety Code for Elevating Devices for the Handicapped, the English version of which is dated April, 1981 and the French version of which is dated December, 1981. SOR/88-632, s. 8; SOR/94-263, s. 10.

### *Use and Operation*

**4.3** No elevating device shall be used or operated with a load in excess of the load that it was

designed and installed to move safely.

**4.4** (1) Subject to subsection (3), no elevating device shall be used or placed in service while any safety device attached thereto is inoperative.

(2) Subject to subsection (3), no safety device attached to an elevating device shall be altered, interfered with or rendered inoperative.

(3) Subsections (1) and (2) do not apply to an elevating device or a safety device that is being inspected, tested, repaired or maintained by a qualified person.

### *Inspection and Testing*

**4.5** Every elevating device and every safety device attached thereto shall be inspected and tested by a qualified person to determine that the prescribed standards are met

(a) before the elevating device and the safety device attached thereto are placed in service;

(b) after an alteration to the elevating device or a safety device attached thereto; and

(c) once every 12 months.

**4.6** (1) A record of each inspection and test made in accordance with section 4.5 shall

(a) be signed by the person who made the inspection and test;

(b) include the date of the inspection and test and the identification and location of the elevating device and safety device that were inspected and tested; and

(c) set out the observations of the person inspecting and testing the elevating device and safety device on the safety of the devices.

(2) Every record referred to in subsection (1) shall be made by the employer and kept by him in the work place in which the elevating device is located for a period of two years after the date on which it is signed in accordance with paragraph (1)(a).

### *Repair and Maintenance*

**4.7** Repair and maintenance of elevating devices or safety devices attached thereto shall be performed by a qualified person appointed by the employer.

# PART V

## BOILERS AND PRESSURE VESSELS

### *Interpretation*

#### **5.1** In this Part,

"boiler code" means CSA Standard B51-M1981, Code for the Construction and Inspection of Boilers and Pressure Vessels, the English version of which is dated March, 1981, as amended to May, 1984 and the French version of which is dated September, 1981, as amended to May, 1984; (*code concernant les chaudières*)

"maximum allowable working pressure" means the maximum allowable working pressure set out in the record referred to in section 5.17; (*pression de fonctionnement maximale autorisée*)

"maximum temperature" means the maximum temperature set out in the record referred to in section 5.17; (*température maximale*)

"piping system" means an assembly of pipes, pipe fittings, valves, safety devices, pumps, compressors and other fixed equipment that contains a gas, vapour or liquid and is connected to a boiler or pressure vessel. (*réseau de canalisation*) SOR/88-632, s. 9.

### *Application*

#### **5.2** This Part does not apply to

- (a) a heating boiler that has a heating surface of 3 m<sup>2</sup> or less;
- (b) a pressure vessel that has a capacity of 40 L or less;
- (c) a pressure vessel that is installed for use at a pressure of 100 kPa or less;
- (d) a pressure vessel that has an internal diameter of 150 mm or less;
- (e) a pressure vessel that has an internal diameter of 600 mm or less and that is used for the storage of hot water;



(f) a pressure vessel that has an internal diameter of 600 mm or less and that is connected to a water-pumping system containing air that is compressed to serve as a cushion;

(g) an interprovincial pipeline; or

(h) a refrigeration plant that has a capacity of 18 kW or less of refrigeration.

### *Design, Construction, Testing, Inspection and Installation*

**5.3** Every boiler, pressure vessel and piping system used in a work place shall meet the standards relating to design, construction, testing, inspection and installation set out in clauses 3.8, 3.9, 4.8 to 5.1, 5.3.4 to 6.3, 7.1 and 8.1 of the boiler code, in so far as is reasonably practicable. SOR/94-263, s. 11.

**5.4** Solid fuel fire-tube boilers operating at a pressure over 103 kPa shall be provided with a fusible plug that meets the standards set out in Appendix A-19 to A-20.8 of Section 1 of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, dated July 1, 1983.

**5.5** (1) Every boiler and pressure vessel shall have at least one safety valve or other equivalent fitting to relieve pressure at or below its maximum allowable working pressure.

(2) Where two or more boilers or pressure vessels are connected to each other and are used at a common operating pressure, they shall each be fitted with one or more safety valves or other equivalent fittings to relieve pressure at or below the maximum allowable working pressure of the boiler or pressure vessel that has the lowest maximum allowable working pressure. SOR/88-632, s. 10(F).

### *Low-Water Cut-Off Devices*

**5.6** (1) Every steam boiler that is not under continuous attendance by a qualified person shall be equipped with a low-water fuel cut-off device that serves no other purpose.

(2) Subject to subsection (3), where an automatically fired hot-water boiler is installed in a forced circulation system and is not under continuous attendance by a qualified person, the boiler shall be equipped with a low-water fuel cut-off device.

(3) Where two or more hot-water boilers of the coil or fin-tube type are installed in one system, a low-water fuel cut-off device is not required on each boiler if

(a) the low-water fuel cut-off device is installed on the main water outlet header; and

(b) a flow switch that will cut off the fuel supply to the burner is installed in the outlet piping on each boiler.

(4) A low-water fuel cut-off device referred to in this section and a flow switch referred to in paragraph (3)(b) shall be installed in such a manner that

(a) they cannot be rendered inoperative; and

(b) they can be tested under operating conditions.

### *Use, Operation, Repair, Alteration and Maintenance*

**5.7** (1) In this section, "qualified person" means a person recognized under the laws of the province in which the boiler, pressure vessel or piping system is located as qualified to inspect boilers, pressure vessels or piping systems.

(2) No person shall use a boiler, pressure vessel or piping system unless it has been inspected by a qualified person in accordance with subsection (3).

(3) A qualified person shall

(a) inspect every boiler, pressure vessel and piping system

(i) after installation,

(ii) after any welding, alteration or repair is carried out on it, and

(iii) in accordance with sections 5.12 to 5.14 and 5.16; and

(b) make a record of each inspection in accordance with section 5.17.

**5.8** Every boiler, pressure vessel and piping system in use at a work place shall be operated, maintained and repaired by a qualified person.

**5.9** All repairs and welding of boilers, pressure vessels and piping systems shall be carried out in accordance with the standards referred to in clauses 5.1, 6.1 and 7.1 of the boiler code.

**5.10** No person shall alter, interfere with or render inoperative any fitting attached to a boiler or pressure vessel except for the purpose of adjusting or testing the fitting.

**5.11** The factor of safety for a high-pressure lap-seam riveted boiler shall be increased by at

least 0.1 each year after 20 years of use and, if the boiler is relocated at any time, it shall not be operated at a pressure higher than 103 kPa.

### *Inspections*

**5.12** (1) Subject to subsection (2) and to sections 5.13 and 5.14, every boiler, pressure vessel and piping system in use in a work place shall be inspected by a qualified person as frequently as is necessary to ensure that the boiler, pressure vessel or piping system is safe for its intended use.

(2) Every boiler in use in a work place shall be inspected

(a) externally, at least once each year; and

(b) internally, at least once every two years. SOR/88-632, s. 11; SOR/94-263, s. 12.

**5.13** (1) Every pressure vessel in use in a work place, other than a pressure vessel that is buried, shall be inspected

(a) externally, at least once each year; and

(b) subject to subsections (2) and (3), internally, at least once every two years.

(2) Where a pressure vessel is used to store anhydrous ammonia, the internal inspection referred to in paragraph (1)(b) may be replaced by an internal inspection conducted once every five years if, at the same time, a hydrostatic test at a pressure equal to one and one-half times the maximum allowable working pressure is conducted.

(3) Air reservoirs used for stationary or portable purposes in the railway industry, instead of being inspected in accordance with subsection (1) and a record completed in accordance with section 5.17 may be inspected, tested and a record made in accordance with the *Air Reservoirs Other Than on Motive Power Equipment Regulations*. SOR/88-632, s. 12(F).

**5.14** (1) Subject to subsection (3), Halon 1301 and Halon 1211 containers shall not be recharged without a test of container strength and a complete visual inspection being carried out, if more than five years have elapsed since the date of the last test and inspection.

(2) Subject to subsection (3), Halon 1301 and Halon 1211 containers that have been continuously in service without discharging may be retained in service for a maximum of 20 years from the date of the last test and inspection at which time they shall be emptied, retested, subjected to a complete visual inspection and re-marked before being placed back in service.

(3) Where a Halon 1301 or Halon 1211 container has been subjected to unusual corrosion, shock or vibration, a visual inspection and a test of container strength shall be carried out.

(4) A Halon 1301 and Halon 1211 container shall be tested by non-destructive test methods such as hydrostatic testing and the containers shall be thoroughly dried before being filled. SOR/88-632, s. 13(F).

**5.15** [Repealed, SOR/88-632, s. 14]

### *Buried Pressure Vessels*

**5.16** (1) Where a pressure vessel is buried, the installation shall conform to the standards set out in clauses A1.1(a) to (g), (i) to (k) and (n) of Appendix A to the boiler code.

(2) Before backfilling is done over a pressure vessel, notice of the proposed backfilling shall be given to the regional safety officer.

(3) Where test plates are used as an indication of corrosion of a buried pressure vessel, the test plates and, subject to subsection (4), the pressure vessel shall be completely uncovered and inspected by a qualified person at least once every three years.

(4) Where the test plates on an inspection referred to in subsection (3) show no appreciable corrosion, the pressure vessel may be completely uncovered and inspected at intervals exceeding three years if the employer notifies the regional safety officer of the condition of the test plates and of the proposed inspection schedule for the pressure vessel.

(5) Every buried pressure vessel shall be completely uncovered and inspected at least every 15 years. SOR/88-632, s. 15(F).

### *Records*

**5.17** (1) A record of each inspection carried out under sections 5.7 and 5.12 to 5.16 shall be completed by the person who carried out the inspection.

(2) Every record referred to in subsection (1)

(a) shall be signed by the person who carried out the inspection; and

(b) shall include

(i) the date of the inspection,

- (ii) the identification and location of the boiler, pressure vessel or piping system that was inspected,
- (iii) the maximum allowable working pressure and the maximum temperature at which the boiler or pressure vessel may be operated,
- (iv) a declaration as to whether the boiler, pressure vessel or piping system meets the standards prescribed by this Part,
- (v) a declaration as to whether, in the opinion of the person carrying out the inspection, the boiler, pressure vessel or piping system is safe for its intended use, and
- (vi) any other observation that the person considers relevant to the safety of employees.

(3) The employer shall keep every record referred to in subsection (1) for a period of 10 years after the inspection is made at the work place in which the boiler, pressure vessel or piping system is located. SOR/88-632, s. 16(F).

## PART VI LIGHTING

### *Interpretation*

**6.1 (1)** In this Part,

"aerodrome apron" means that part of a land aerodrome intended to accommodate the loading and unloading of passengers and cargo and the refuelling, servicing, maintenance and parking of aircraft; (*aire de trafic*)

"aircraft stand" means that part of an aerodrome apron intended to be used for the parking of aircraft for the purpose of loading or unloading passengers and providing ground services; (*poste de stationnement*)

"primary grain elevator" means a grain elevator the principal use of which is the receiving of grain directly from producers for storage or forwarding; (*installation primaire*)

"task position" means a position at which a visual task is performed; (*poste de travail*)

"VDT" means a visual display terminal. (*TEV*)

(2) For the purposes of this Part, 1 lx is equal to .0929 fc. SOR/89-515, s. 1.

### *Application*

**6.2** This Part does not apply in respect of lighting in any underground portion of a coal mine. SOR/89-515, s. 1.

### *Measurement of Average Levels of Lighting*

**6.3** For the purposes of sections 6.4 to 6.10, the average level of lighting at a task position or in an area shall be determined

(a) by making four measurements at different places representative of the level of lighting at the task position or, in an area, representative of the level of lighting 1 m above the floor of the area; and

(b) by dividing the aggregate of the results of those measurements by four. SOR/89-515, s. 1.

### *Lighting--Office Areas*

**6.4** The average level of lighting at a task position or in an area set out in Column I of an item of Schedule I, other than a task position or area referred to in section 6.7 or 6.9, shall not be less than the level set out in Column II of that item. SOR/89-515, s. 1.

### *Lighting--Industrial Areas*

**6.5** The average level of lighting in an area set out in Column I of an item of Schedule II, other than an area referred to in section 6.7 or 6.9, shall not be less than the level set out in Column II of that item. SOR/89-515, s. 1.

### *Lighting--General Areas*

**6.6** The average level of lighting in an area set out in Column I of an item of Schedule III, other than an area referred to in section 6.7 or 6.9, shall not be less than the level set out in Column II of that item. SOR/89-515, s. 1.

## *Lighting--VDT*

**6.7** (1) The average level of lighting at a task position or in an area set out in Column I of an item of Schedule IV shall not be more than the level set out in Column II of that item.

(2) Reflection glare on a VDT screen shall be reduced to the point where an employee at a task position is able to

(a) read every portion of any text displayed on the screen; and

(b) see every portion of the visual display on the screen.

(3) Where VDT work requires the reading of a document, supplementary lighting shall be provided where necessary to give a level of lighting of at least 500 lx on the document. SOR/89-515, s. 1.

## *Lighting--Aerodrome Aprons and Aircraft Stands*

**6.8** (1) Subject to subsection (2), the average level of lighting at a task position on an aerodrome apron shall not be less than 10 lx.

(2) The average level of lighting at a task position on an aircraft stand shall not be less than 20 lx. SOR/89-515, s. 1.

## *Lighting--Artefactual Exhibits and Archival Materials*

**6.9** The average level of lighting in an area in which artefactual exhibits or archival materials are handled or stored shall not be less than 50 lx. SOR/89-515, s. 1.

## *Emergency Lighting*

**6.10** (1) Emergency lighting shall be provided to illuminate the following areas within buildings:

(a) exits and corridors;

(b) principal routes providing access to exits in open floor areas; and

(c) floor areas where employees normally congregate.

(2) Except in the case of a primary grain elevator in which hand-held lamps are used for emergency lighting, all emergency lighting provided in accordance with subsection (1) shall

(a) operate automatically in the event that the regular power supply to the building is interrupted;

(b) provide an average level of lighting of not less than 10 lx; and

(c) be independent of the regular power source.

(3) Where a generator is used as a power source for emergency lighting, the inspection, testing and maintenance of the generator shall be in accordance with the requirements referred to in section 6.7 of the National Fire Code, as amended from time to time.

(4) Where a central storage battery system is used as a power source for emergency lighting or where emergency lighting is provided by a self-contained emergency lighting unit, the battery system or the unit shall be tested

(a) monthly by hand; and

(b) annually under simulated power failure or electrical fault conditions.

(5) Where a battery, other than a hermetically sealed battery, is tested in accordance with paragraph (4)(a), the electrolyte level of the battery shall be checked and, if necessary, adjusted to the proper level.

(6) Where a self-contained emergency lighting unit is tested in accordance with paragraph (4)(b), all lamps forming part of the unit shall be operated for the time period set out in Sentence 3.2.7.3(2) of the National Building Code, as amended from time to time, that is applicable to the class of buildings to which the building in which the unit is installed belongs.

(7) Every employer shall make a record of the results of each test performed in accordance with subsection (3) or (4) and keep the record for two years after the test. SOR/89-515, s. 1.

### *Minimum Levels of Lighting*

**6.11** (1) Subject to subsections (2) to (4), the level of lighting at any place at a task position or in an area that may be measured for the purposes of section 6.3 shall not be less than one third of the level of lighting prescribed by this Part for that task position or area.

(2) The level of lighting at any place at a task position or in an area set out in Column I of item 8

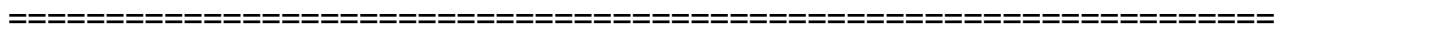


or 9 of Schedule III or Column I of item 1 of Schedule IV that may be measured for the purposes of section 6.3 shall not be less than one tenth of the level of lighting prescribed by this Part for that task position or area.

(3) The level of lighting at any place at a task position referred to in section 6.8 that may be measured for the purposes of section 6.3 shall not be less than one quarter of the level of lighting prescribed by this Part for that task position.

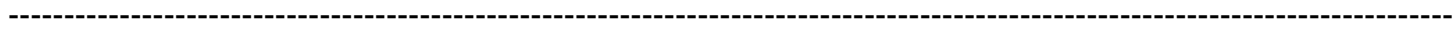
(4) In a building the construction of which is commenced after October 31, 1990, the level of emergency lighting at any place in an area referred to in subsection 6.10(1) that may be measured for the purposes of section 6.3 shall not be less than 0.25 lx. SOR/89-515, s. 1.

**SCHEDULE I**  
*(s. 6.4)*  
**LEVELS OF LIGHTING IN OFFICE AREAS**



Column I                      Column II

Item Task position or area Level in lx



1. DESK WORK

(a) Task positions at which cartography, designing, drafting, plan-reading or other very difficult visual tasks are performed 1 000

(b) Task positions at which business machines are operated or stenography, accounting, typing, filing, clerking, billing, continuous reading or writing or other difficult visual tasks are performed 500

2. OTHER OFFICE WORK

Conference and interview rooms, file storage areas, switchboard or reception areas or other areas where ordinary visual tasks are performed

300

3. SERVICE AREAS

(a) Stairways and corridors that are

(i) used frequently

100

(ii) used infrequently

50

(b) Stairways that are used only in emergencies

30

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SOR/89-515, s. 1.

SCHEDULE II  
(s. 6.5)  
LEVELS OF LIGHTING IN INDUSTRIAL AREAS

=====  
Column I Column II

Item Area      Level in lx

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1. GARAGES

(a) Main repair and maintenance areas, other than those referred to in paragraph (b)

300

(b)Main repair and maintenance areas used for repairing and maintaining cranes, bulldozers and other major equipment	150
(c)General work areas adjacent to a main repair and maintenance area referred to in paragraph (b)	50
(d)Fuelling areas	150
(e)Battery rooms	100
(f)Other areas in which there is	
(i) a high or moderate level of activity	100
(ii) a low level of activity	50

## 2. LABORATORIES

(a)Areas in which instruments are read and where errors in such reading may be hazardous to the safety or health of an employee	750
(b)Areas in which a hazardous substance is handled	500
(c)Areas in which laboratory work requiring close and prolonged attention is performed	500
(d)Areas in which other laboratory work is performed	300

## 3. LOADING PLATFORMS, STORAGE ROOMS AND WAREHOUSES

(a)Areas in which packages are frequently checked or sorted	250
(b)Areas in which packages are infrequently checked or sorted	75

- (c)Docks (indoor and outdoor), piers and other locations where packages or containers are loaded or unloaded 150
- (d)Areas in which grain or granular material is loaded or unloaded in bulk 30
- (e)Areas in which goods are stored in bulk or where goods in storage are all of one kind 30
- (f)Areas where goods in storage are of different kinds 75
- (g)Any other area 10

4. MACHINE AND WOODWORKING SHOPS

- (a)Areas in which medium or fine bench or machine work is performed 500
- (b)Areas in which rough bench or machine work is performed 300
- (c)Any other area 200

5. MANUFACTURING AND PROCESSING AREAS

- (a)Major control rooms or rooms with dial displays 500
- (b)Areas in which a hazardous substance is processed, manufactured or used
  - (i) in main work areas 500
  - (ii) in surrounding areas 200
- (c)Areas in which substances that are not hazardous substances are processed, manufactured or used or where automatically controlled equipment operates

(i) in main work areas 100

(ii) in surrounding areas 50

6.

## SERVICE AREAS

(a) Stairways and elevating devices that are

(i) used frequently 100

(ii) used infrequently 50

(b) Stairways that are used only in emergencies 30

(c) Corridors and aisles that are used by persons and mobile equipment

(i) at main intersections 100

(ii) at other locations 50

(d) Corridors and aisles that are used by mobile equipment only 50

(e) Corridors and aisles that are used by persons only and are

(i) used frequently by employees 50

(ii) used infrequently by employees 30

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SOR/88-68, s. 14; SOR/89-515, s. 1; SOR/94-263, s. 13; SOR/96-525, s. 11.

## SCHEDULE III

(s. 6.6)

## LEVELS OF LIGHTING--GENERAL AREAS

=====

Column I Column II

Item Area Level in lx

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1. BUILDING EXTERIORS

(a) Entrances and exits that are

(i) used frequently 100

(ii) used infrequently 50

(b) Passageways used by persons

(i) at vehicular intersections 30

(ii) at other locations 10

(c) Areas used by persons and mobile equipment in which there is

(i) a high or moderate level of activity 20

(ii) a low level of activity 10

(d) Storage areas in which there is

(i) a high or moderate level of activity 30

(ii) a low level of activity 10

2. FIRST AID ROOMS

(a) in treatment and examination area 1 000

(b)in other areas	500
3. FOOD PREPARATION AREAS	500
4. PERSONAL SERVICE ROOMS	200
5. BOILER ROOMS	200
6. ROOMS IN WHICH PRINCIPAL HEATING, VENTILATION OR AIR CONDITIONING EQUIPMENT IS INSTALLED	50
7. EMERGENCY SHOWER FACILITIES AND EMERGENCY EQUIPMENT LOCATIONS	50
8. PARKING AREAS	
(a)Covered	50
(b)Open	10
9. LOBBIES AND ATRIA	100

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SOR/89-515, s. 1; SOR/96-525, s. 12.

SCHEDULE IV  
(s. 6.7)  
LEVELS OF LIGHTING--VDT WORK

=====

Column I

Column II

Item Task position or area Level in lx

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1. VDT WORK

(a)Task positions at which data entry and retrieval work are performed intermittently	500
(b)Task positions at which data entry work is performed exclusively	750
(c)Air traffic controller areas	100
(d)Telephone operator areas	300

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SOR/89-515, s. 1.

PART VII  
LEVELS OF SOUND

*Interpretation*

7.1 In this Part,

"A-weighted sound pressure level" means a sound pressure level as determined by a measurement system which includes an A-weighting filter that meets the requirements set out in the International Electrotechnical Commission Standard 651 (1979), *Sound Level Meters*, as amended from time to time; (*niveau de pression acoustique pondérée A*)

"dBA" means decibel A-weighted and is a unit of A-weighted sound pressure level; (*dBA*)

"large truck" [Repealed, SOR/98-589, s. 1]

"noise exposure level (Lex,8)" means 10 times the logarithm to the base 10 of the time integral over any 24 hour period of a squared A-weighted sound pressure divided by 8, the reference sound pressure being 20 µPa; (*niveau d'exposition (Lex,8)*)



"sound level meter" means a device for measuring sound pressure level that meets the performance requirements for a Type 2 instrument as specified in the International Electrotechnical Commission Standard 651 (1979), *Sound Level Meters*, as amended from time to time; (*sonomètre*)

"sound pressure level" means 20 times the logarithm to the base 10 of the ratio of the root mean square pressure of a sound to the reference sound pressure of 20 µPa, expressed in decibels. (*niveau de pression acoustique*) SOR/91-448, s. 1; SOR/98-589, s. 1.

### *Measurement and Calculation of Exposure*

**7.2** (1) For the purposes of this Part, the exposure of an employee to sound shall be measured using an instrument that

(a) is recommended for that measurement in clause 4.3 of CSA Standard CAN/CSA-Z107.56-M86, *Procedures for the Measurement of Occupational Noise Exposure*, as amended from time to time; and

(b) meets the requirements for such an instrument set out in clause 4 of the Standard referred to in paragraph (a).

(2) The exposure of an employee to sound shall be measured in accordance with clauses 5, 6.4.1, 6.4.4, 6.5.2, 6.5.4, 6.6.2 and 6.6.4 of the Standard referred to in paragraph (1)(a).

(3) For the purposes of this Part, the measurement and calculation of the noise exposure level (Lex, 8) to which an employee is exposed shall take into account the exposure of the employee to A-weighted sound pressure levels of 74 dBA and greater.

(4) The measurement and calculation of the noise exposure level (Lex, 8) referred to in subsection (3) may also take into account the exposure of the employee to A-weighted sound pressure levels that are less than 74 dBA. SOR/91-448, s. 1.

### *Hazard Investigation*

**7.3** (1) Where an employee in a work place may be exposed to an A-weighted sound pressure level equal to or greater than 84 dBA for a duration that is likely to endanger the employee's hearing, the employer shall, without delay,

(a) appoint a qualified person to carry out an investigation of the degree of exposure; and

(b) notify the safety and health committee or the safety and health representative, if either

exists, of the investigation and the name of the person appointed to carry out the investigation.

(2) [Repealed, SOR/98-589, s. 2]

(3) For the purposes of subsection (1), the measurement of the A-weighted sound pressure level in a work place shall be performed instantaneously, during normal working conditions, using the slow response setting of a sound level meter.

(4) In the investigation referred to in subsection (1), the following matters shall be considered:

(a) the sources of sound in the work place;

(b) the A-weighted sound pressure levels to which the employee is likely to be exposed and the duration of such exposure;

(c) the methods being used to reduce this exposure;

(d) whether the exposure of the employee is likely to exceed the limits prescribed by section 7.4; and

(e) whether the employee is likely to be exposed to a noise exposure level (Lex,8) equal to or greater than 84 dBA.

(5) On completion of the investigation and after consultation with the safety and health committee or the safety and health representative, if either exists, the person appointed to carry out the investigation shall set out in a written report signed and dated by the person

(a) observations respecting the matters considered in accordance with subsection (4);

(b) recommendations respecting the measures that should be taken in order to comply with sections 7.4 to 7.8; and

(c) recommendations respecting the use of hearing protectors by employees who are exposed to a noise exposure level (Lex,8) equal to or greater than 84 dBA and not greater than 87 dBA.

(6) The report shall be kept by the employer at the work place in respect of which it applies for a period of ten years after the date of the report.

(7) Where it is stated in the report that an employee is likely to be exposed to a noise exposure level (Lex,8) equal to or greater than 84 dBA, the employer shall, without delay,

(a) post and keep posted a copy of the report in a conspicuous place in the work place in respect of which it applies; and

(b) provide the employee with written information describing the hazards associated with exposure to high levels of sound. SOR/91-448, s. 1; SOR/98-589, s. 2.

### *Limits of Exposure*

**7.4** No employee in a work place shall, in any 24 hour period, be exposed to

(a) an A-weighted sound pressure level set out in column I of the schedule for a duration of exposure exceeding the applicable duration set out in column II, or

(b) a noise exposure level (Lex 8) that exceeds 87 dBA. SOR/91-448, s. 1; SOR/98-589, s. 3.

### *Reduction of Sound Exposure*

**7.5** Insofar as is reasonably practicable, every employer shall, by engineering controls or other physical means other than hearing protectors, reduce the exposure to sound of employees to a level that does not exceed the limits prescribed by section 7.4. SOR/91-448, s. 1; SOR/94-33, s. 2(F); SOR/98-589, s. 4.

### *Report to Regional Safety Officer*

**7.6** Where it is not reasonably practicable, without providing hearing protectors, for an employer to maintain the exposure to sound of an employee to whom section 7.4 applies at a level that does not exceed the limits prescribed by that section, the employer shall, without delay,

(a) make a report in writing to the regional safety officer setting out the reasons why it is not reasonably practicable to do so; and

(b) provide a copy of the report to the safety and health committee or the safety and health representative, if either exists. SOR/91-448, s. 1; SOR/98-589, s. 5.

### *Hearing Protection*

**7.7** (1) Where an employer is required to make a report pursuant to section 7.6, the employer shall, as soon as is reasonably practicable, provide every employee whose exposure to sound

is likely to exceed the limits prescribed by section 7.4 with a hearing protector that

(a) meets the requirements set out in CSA Standard Z94.2-M1984, *Hearing Protectors*, as amended from time to time; and

(b) prevents the employee using the hearing protector from being exposed to a level of sound that exceeds the limits prescribed by section 7.4.

(2) Where an employer provides a hearing protector to an employee pursuant to subsection (1), the employer shall

(a) in consultation with the safety and health committee or the safety and health representative, if either exists, formulate a program to train the employee in the fit, care and use of the hearing protector; and

(b) implement the program.

(3) Every employer shall ensure that every person, other than an employee, to whom the employer grants access to a work place where the person is likely to be exposed to a level of sound that exceeds the limits set out in section 7.4 uses a hearing protector that meets the standard referred to in paragraph (1)(a). SOR/91-448, s. 1; SOR/94-33, s. 3; SOR/98-589, s. 6.

*Warning Signs*

**7.8** (1) At every work place where an employee may be exposed to an A-weighted sound pressure level greater than 87 dBA, the employer shall, at conspicuous locations within the work place, post and keep posted signs warning of a potentially hazardous level of sound in the work place.

(2) For the purposes of subsection (1), the measurement of the A-weighted sound pressure level in a work place shall be performed instantaneously, during normal working conditions, using the slow response setting of a sound level meter. SOR/91-448, s. 1; SOR/98-589, s. 7.

**SCHEDULE**  
*(Section 7.4)*

**MAXIMUM DURATION OF EXPOSURE TO A-WEIGHTED SOUND PRESSURE LEVELS IN THE WORK PLACE**

=====

Column I Column II

A-weighted sound Maximum duration of exposure

pressure level in hours per employee per

(dBA) 24 hour period-----

87 8.0

88 6.4

89 5.0

90 4.0

91 3.2

92 2.5

93 2.0

94 1.6

95 1.3

96 1.0

97 0.80

98 0.64

99 0.50

100 0.40

101 0.32

102 0.25

103 0.20

104 0.16

105 0.13  
106 0.10  
107 0.080  
108 0.064  
109 0.050  
110 0.040  
111 0.032  
112 0.025  
113 0.020  
114 0.016  
115 0.013  
116 0.010  
117 0.008  
118 0.006  
119 0.005  
120 0.004

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SOR/91-448, s. 1; SOR/98-589, s. 8.

## SCHEDULE II

[Repealed, SOR/98-589, s. 9]

## PART VIII ELECTRICAL SAFETY

## *Interpretation*

### **8.1** In this Part,

"Canadian Electrical Code" means

(a) CSA Standard C22.1-1990, *Canadian Electrical Code, Part I*, dated January 1990, and

(b) CSA Standard C22.3 No.1-M1979, *Overhead Systems and Underground Systems*, dated April, 1979; (*Code canadien de l'électricité*)

"control device" means a device that will safely disconnect electrical equipment from its source of energy; (*dispositif de commande*)

"electrical equipment" means equipment for the generation, distribution or use of electricity; (*outillage électrique*)

"guarantor" means a person who gives a guarantee of isolation; (*garant*)

"guarded" means covered, shielded, fenced, enclosed or otherwise protected by means of suitable covers or casings, barriers, guardrails, screens, mats or platforms to remove the possibility of dangerous contact or approach by persons or objects; (*protégé*)

"isolated" means separated or disconnected from every source of electrical, hydraulic, pneumatic or other kind of energy that is capable of making electrical equipment dangerous; (*isolé*)

"person in charge" means an employee who supervises employees performing work on or a live test of isolated electrical equipment. (*responsable*) SOR/88-632, s. 17(F); SOR/94-263, s. 14; SOR/98-427, s. 1.

## *Application*

**8.2** This Part does not apply to the underground workings of mines. SOR/94-263, s. 15.

## *Standards*

**8.3** (1) The design, construction and installation of all electrical equipment shall meet the

standards set out in the *Canadian Electrical Code, Part I*, in so far as is reasonably practicable.

(2) The operation and maintenance of all electrical equipment shall meet the standards set out in the Canadian Electrical Code. SOR/94-263, s. 16.

### *Safety Procedures*

**8.4** (1) All testing or work performed on electrical equipment shall be performed by a qualified person or an employee under the direct supervision of a qualified person.

(2) Where the electrical equipment has a voltage in excess of 5,200 V between any two conductors or in excess of 3,000 V between any conductor and ground,

(a) the qualified person or the employee referred to in subsection (1) shall use such insulated protection equipment and tools as will protect him from injury during the performance of the work; and

(b) the employee referred to in subsection (1) shall be instructed and trained in the use of the insulated protection equipment and tools.

**8.5** (1) Subject to subsections (2) and (3), no employee shall work on electrical equipment unless the equipment is isolated.

(2) Where it is not reasonably practicable to isolate the electrical equipment and an employee must work on live equipment,

(a) the employer shall instruct the employee in procedures that are safe for work on live conductors; and

(b) the employee shall follow those procedures.

(3) Where electrical equipment is not live but is capable of becoming live, no employee shall work on the equipment unless

(a) procedures that are safe for work on live equipment are used; or

(b) a safety ground is connected to the equipment.

(4) Subject to subsections (5) and (6), where an employee is working on or near electrical equipment that is live or may become live, the electrical equipment shall be guarded.

(5) Subject to subsection (6), where it is not practicable for the electrical equipment referred to



in subsection (4) to be guarded, the employer shall take measures to protect the employee from injury by insulating the equipment from the employee or the employee from ground.

(6) Where live electrical equipment is not guarded or insulated in accordance with subsection (4) or (5) or where the employee referred to in subsection (5) is not insulated from ground, the employee shall not work so near to any live part of the electrical equipment that is within a voltage range listed in column I of an item of the schedule to this Part that the distance between the body of the employee or any thing with which the employee is in contact and the live part of the equipment is less than

(a) the distance set out in column II of that item, where the employee is not a qualified person; or

(b) the distance set out in column III of that item, where the employee is a qualified person.

(7) No employee shall work near a live part of any electrical equipment referred to in subsection (6) where there is a hazard that an unintentional movement by the employee would bring any part of the body of the employee or any thing with which the employee is in contact closer to that live part than the distance referred to in that subsection. SOR/88-632, s. 18(F); SOR/263, s. 17(F); SOR/98-427, s. 2.

**8.6** No employee shall work on or near high voltage electrical equipment unless he is authorized to do so by his employer.

**8.7** A legible sign with the words "Danger--High Voltage" and "Danger--Haute Tension" in letters that are not less than 50 mm in height on a contrasting background shall be posted in a conspicuous place at every approach to live high voltage electrical equipment.

### *Safety Watcher*

**8.8** (1) Where an employee is working on or near live electrical equipment and, because of the nature of the work or the condition or location of the work place, it is necessary for the safety of the employee that the work be observed by a person not engaged in the work, the employer shall appoint a safety watcher

(a) to warn all employees in the work place of the hazard; and

(b) to ensure that all safety precautions and procedures are complied with.

(2) A safety watcher shall be

(a) informed of his duties as a safety watcher and of the hazard involved in the work;

- (b) trained and instructed in the procedures to follow in the event of an emergency;
- (c) authorized to stop immediately any part of the work that he considers dangerous; and
- (d) free of any other duties that might interfere with his duties as a safety watcher.

(3) For the purposes of subsection (1), an employer may appoint himself as a safety watcher.

### *Coordination of Work*

**8.9** Where an employee is working on or in connection with electrical equipment, that employee and every other person who is so working, including every safety watcher, shall be fully informed by the employer with respect to the safe coordination of their work.

### *Poles and Elevated Structures*

**8.10** (1) Before an employee climbs a pole or elevated structure that is used to support electrical equipment, the employer shall give instructions and training to the employee respecting inspections and tests of the pole or structure to be carried out before the pole or structure is climbed.

(2) Where, as a result of an inspection or test of a pole or elevated structure referred to in subsection (1), it appears to an employee that the pole or structure will be safe for climbing only when temporary supports have been installed, pike-poles alone shall not be used for such supports.

(3) No employee shall work on any pole or elevated structure referred to in subsection (1) unless he has been instructed and trained in the rescue of employees who may be injured in the course of the work.

**8.11** Every pole or elevated structure that is embedded in the ground and is used to support electrical equipment shall meet the standards set out in

(a) CSA Standard CAN3-015-M83, Wood Utility Poles and Reinforcing Studs, dated January, 1983; or

(b) CSA Standard A14-M1979, *Concrete Poles*, the English version of which is dated September 1979 and the French version of which is dated November 1987. SOR/94-263, s. 18.

## *Isolation of Electrical Equipment*

**8.12** (1) Before an employee isolates electrical equipment or changes or terminates the isolation of electrical equipment, the employer shall issue written instructions with respect to the procedures to be followed for the safe performance of that work.

(2) The instructions referred to in subsection (1) shall be signed by the employer and shall specify

(a) the date and hour when the instructions are issued;

(b) the date and hour of the commencement and of the termination of the period during which the instructions are to be followed;

(c) the name of the employee to whom the instructions are issued; and

(d) where the instructions are in respect of the operation of a control device that affects the isolation of the electrical equipment,

(i) the device to which the instructions apply, and

(ii) where applicable, the correct sequence of procedures.

(3) A copy of the instructions referred to in subsection (1) shall be shown and explained to the employee.

(4) The instructions referred to in subsection (1) shall be kept readily available for examination by employees for the period referred to in paragraph (2)(b) and thereafter shall be kept by the employer for a period of one year at his place of business nearest to the work place in which the electrical equipment is located. SOR/88-632, s. 19((F).

**8.13** (1) Subject to subsection (4), no work on or live test of isolated electrical equipment shall be performed unless

(a) isolation of the equipment has been confirmed by test; and

(b) the employer has determined, on the basis of visual observation, that every control device and every locking device necessary to establish and maintain the isolation of the equipment

(i) is set in the safe position with the disconnecting contacts of control devices safely separated or, in the case of a draw-out type electrical switch gear, is withdrawn to its

full extent from the contacts of the electrical switch gear,

(ii) is locked out, and

(iii) bears a distinctive tag or sign designed to notify persons that operation of the control device and movement of the locking device are prohibited during the performance of the work or live test.

(2) Where more than one employee is performing any work on or live test of isolated electrical equipment, a separate tag or sign for each such employee shall be attached to each control device and locking device referred to in subsection (1).

(3) The tag or sign referred to in subparagraph (1)(b)(iii) or subsection (2) shall

(a) contain the words "DO NOT OPERATE--DÉFENSE D'ACTIONNER" or display a symbol conveying the same meaning;

(b) show the date and hour that the control device and the locking device referred to in paragraph (1)(b) were set in the safe position or were withdrawn to their full extent from the contacts;

(c) show the name of the employee performing the work or live test;

(d) where used in connection with a live test, be distinctively marked as a testing tag or sign;

(e) be removed only by the employee performing the work or live test; and

(f) be used for no purpose other than the purpose referred to in paragraph (1)(b)(iii).

(4) Where, because of the nature of the work in which the electrical equipment is being used, it is not practicable to comply with subsection (1), no work on or live test of electrical equipment shall be performed unless a guarantee of isolation referred to in section 8.14 is given to the person in charge. SOR/88-632, s. 20(F); SOR/94-263, s. 19(F).

### *Guarantees of Isolation for Electrical Equipment*

[SOR/88-632, s. 21(F)]

**8.14** (1) No employee shall give or receive a guarantee of isolation for electrical equipment unless he is authorized in writing by his employer to give or receive a guarantee of isolation.

(2) Not more than one employee shall give a guarantee of isolation for a piece of electrical equipment for the same period of time.

(3) Before an employee performs work on or a live test of isolated electrical equipment, the person in charge shall receive from the guarantor

(a) a written guarantee of isolation; or

(b) where owing to an emergency it is not practicable for the person in charge to receive a written guarantee of isolation, a non-written guarantee of isolation.

(4) A written guarantee of isolation referred to in paragraph (3)(a) shall be signed by the guarantor and by the person in charge and shall contain the following information:

(a) the date and hour when the guarantee of isolation is given to the person in charge;

(b) the date and hour when the electrical equipment will become isolated;

(c) the date and hour when the isolation will be terminated, if known;

(d) the procedures by which isolation is assured;

(e) the name of the guarantor and the person in charge; and

(f) a statement as to whether live tests are to be performed.

(5) Where a non-written guarantee of isolation referred to in paragraph (3)(b) is given, a written record thereof shall forthwith

(a) be made by the guarantor; and

(b) be made and signed by the person in charge.

(6) A written record referred to in subsection (5) shall contain the information referred to in subsection (4).

(7) Every written guarantee of isolation and every written record referred to in subsection (5) shall be

(a) kept by the person in charge readily available for examination by the employee performing the work or live test until the work or live test is completed;

(b) given to the employer when the work or live test is completed; and

(c) kept by the employer for a period of one year after the completion of the work or live test at his place of business nearest to the work place in which the electrical equipment is located. SOR/88-632, ss. 21, 22; SOR/94-263, s. 20(F); SOR/96-525, s. 13.

**8.15** Where a written guarantee of isolation or a written record of an oral guarantee of isolation is given to a person in charge and the person in charge is replaced at the work place by another person in charge before the guarantee has terminated, the other person in charge shall sign the written guarantee of isolation or written record of the oral guarantee of isolation. SOR/88-632, s. 23(F).

**8.16** Before an employee gives a guarantee of isolation for electrical equipment that obtains all or any portion of its electrical energy from a source that is not under his direct control, the employee shall obtain a guarantee of isolation in respect of the source from the person who is in direct control thereof and is authorized to give the guarantee in respect thereof. SOR/88-632, s. 23(F).

### *Live Test*

**8.17** (1) No employee shall give a guarantee of isolation for the performance of a live test on isolated electrical equipment unless

(a) any other guarantee of isolation given in respect of the electrical equipment for any part of the period for which the guarantee of isolation is given is terminated;

(b) every person to whom the other guarantee of isolation referred to in paragraph (a) was given has been informed of its termination; and

(c) any live test to be performed on the electrical equipment will not be hazardous to the safety or health of the person performing the live test.

(2) Every person performing a live test shall warn all persons who, during or as a result of the test, are likely to be exposed to a hazard. SOR/88-632, s. 23(F).

### *Termination of Guarantee of Isolation*

**8.18** (1) Every person in charge shall, when work on or a live test of isolated electrical equipment is completed,

(a) inform the guarantor thereof; and

(b) make and sign a record in writing containing the date and hour when he so informed the guarantor and the name of the guarantor.

(2) On receipt of the information referred to in subsection (1), the guarantor shall make and sign a record in writing containing

(a) the date and hour when the work or live test was completed; and

(b) the name of the person in charge.

(3) The records referred to in subsections (1) and (2) shall be kept by the employer for a period of one year after the date of signature thereof at his place of business nearest to the work place in which the electrical equipment is located. SOR/88-632, s. 24(F).

### *Safety Grounding*

**8.19** (1) No employee shall attach a safety ground to electrical equipment unless he has tested the electrical equipment and has established that it is isolated.

(2) Subsection (1) does not apply in respect of electrical equipment that is grounded by means of a grounding switch that is an integral part of the equipment. SOR/88-632, s. 25(F).

**8.20** (1) Subject to subsection (2), no work shall be performed on any electrical equipment in an area in which is located

(a) a grounding bus,

(b) a station grounding network,

(c) a neutral conductor,

(d) temporary phase grounding, or

(e) a metal structure

unless the equipment referred to in paragraphs (a) to (e) is connected to a common grounding network.

(2) Where, after the connections referred to in subsection (1) are made, a safety ground is required to ensure the safety of an employee working on the electrical equipment referred to in that subsection, the safety ground shall be connected to the common grounding network.

**8.21** Every conducting part of a safety ground on isolated electrical equipment shall have sufficient current carrying capacity to conduct the maximum current that is likely to be carried on any part of the equipment for such time as is necessary to permit operation of any device that is installed on the electrical equipment so that, in the event of a short circuit or other electrical current overload, the electrical equipment is automatically disconnected from its source of electrical energy. SOR/88-632, s. 26(F).

**8.22** (1) For the purposes of subsection (2), a

"point of safety grounding" means

(a) a grounding bus, a station grounding network, a neutral conductor, a metal structure or an aerial ground, or

(b) one or more metal rods that are not less than 16 mm in diameter and are driven not less than 1 m into undisturbed compact earth at a minimum distance of 4.5 m from the base of the pole, structure, apparatus or other thing to which the electrical equipment is attached or from the area where persons on the ground work and in a direction away from the main work area. (*point de mise à la terre*)

(2) No safety ground shall be attached to or disconnected from isolated electrical equipment except in accordance with the following requirements:

(a) the safety ground shall, to the extent that is practicable, be attached to the pole, structure, apparatus or other thing to which the electrical equipment is attached;

(b) all isolated conductors, neutral conductors and all non-insulated surfaces of the electrical equipment shall be short-circuited, electrically bonded together and attached by a safety ground to a point of safety grounding in a manner that establishes equal voltage on all surfaces that can be touched by persons who work on the electrical equipment;

(c) the safety ground shall be attached by means of mechanical clamps that are tightened securely and are in direct contact with bare metal;

(d) the safety ground shall be so secured that none of its parts can make contact accidentally with any live electrical equipment;

(e) the safety ground shall be attached and disconnected using insulated protection equipment and tools;

(f) the safety ground shall, before it is attached to isolated electrical equipment, be attached to a point of safety grounding; and



(g) the safety ground shall, before being disconnected from the point of safety grounding, be removed from the isolated electrical equipment in such a manner that the employee avoids contact with all live conductors. SOR/88-632, s. 27; SOR/94-263, s. 21(F); SOR/98-427, s. 3(F).

### *Switches and Control Devices*

**8.23** (1) Every control device shall be so designed and located as to permit quick and safe operation at all times.

(2) The path of access to every electrical switch, control device or meter shall be free from obstruction.

(3) Where an electrical switch or other device controlling the supply of electrical energy to electrical equipment is operated only by a person authorized to do so by the employer, the switch or other device shall be fitted with a locking device that only an authorized person can activate.

## SCHEDULE (Subsection 8.5(6)) DISTANCES FROM LIVE ELECTRICAL PARTS

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Column I	Column II	Column III
Voltage Range of Part:	Distance	Distance
Item Part to Ground	in metres	in metres
<hr/>		
1. Over 425 to 12,000	3 0.9	
2. Over 12,000 to 22,000	3 1.2	

3. Over 22,000 to 50,000 3 1.5
  4. Over 50,000 to 90,000 4.5 1.8
  5. Over 90,000 to 120,000 4.5 2.1
  6. Over 120,000 to 150,000 6 2.7
  7. Over 150,000 to 250,000 6 3.3
  8. Over 250,000 to 300,000 7.5 3.9
  9. Over 300,000 to 350,000 7.5 4.5
  10. Over 350,000 to 400,000 9 5.4
- 

SOR/98-427, s. 4.

## PART IX SANITATION

### *Interpretation*

#### **9.1** In this Part,

"ARI" means the Air-Conditioning and Refrigeration Institute of the United States; (*ARI*)

"Canadian Plumbing Code" means the Canadian Plumbing Code, 1985; (*Code canadien de la plomberie*)

"field accommodation" means fixed or mobile accommodation that is living, eating or sleeping quarters provided by an employer for the accommodation of employees at a work place; (*logement sur place*)

"mobile accommodation" means field accommodation that may be easily and quickly

moved. (*logement mobile*)

## *General*

**9.2** (1) Every employer shall maintain each personal service room and food preparation area used by employees in a clean and sanitary condition.

(2) Personal service rooms and food preparation areas shall be so used by employees that the rooms or areas will remain as clean and in such a sanitary condition as is possible.

**9.3** All janitorial work that may cause dusty or unsanitary conditions shall be carried out in a manner that will prevent the contamination of the air by dust or other substances injurious to health.

**9.4** Each personal service room shall be cleaned at least once every day that it is used.

**9.5** (1) Every plumbing system that supplies potable water and removes water-borne waste

(a) shall meet the standards set out in the Canadian Plumbing Code; and

(b) subject to subsection (2), shall be connected to a municipal sanitation sewer or water main.

(2) Where it is not practicable to comply with paragraph (1)(b), the employer shall provide a waste disposal system that meets the standards set out in ANSI standard ANSI Z4.3-1979, Minimum Requirements for Nonsewered Waste-Disposal Systems, dated November 8, 1978. SOR/94-263, s. 22(F).

**9.6** (1) Each container that is used for solid or liquid waste in the work place shall

(a) be equipped with a tight-fitting cover;

(b) be so constructed that it can easily be cleaned and maintained in a sanitary condition;

(c) be leak-proof; and

(d) where there may be internal pressure in the container, be so designed that the pressure is relieved by controlled ventilation.

(2) Each container referred to in subsection (1) shall be emptied at least once every day that it is used.

**9.7** (1) Each enclosed part of a work place, each personal service room and each food preparation area shall be constructed, equipped and maintained in a manner that will prevent the entrance of vermin.

(2) Where vermin have entered any enclosed part of a work place, personal service room or food preparation area, the employer shall immediately take all steps necessary to eliminate the vermin and prevent the re-entry of the vermin.

**9.8** No person shall use a personal service room for the purpose of storing equipment unless a closet fitted with a door is provided in that room for that purpose. SOR/88-632, s. 28(F).

**9.9** In each personal service room and food preparation area, the temperature, measured one metre above the floor in the centre of the room or area, shall be maintained at a level of not less than 18°C and, where reasonably practicable, not more than 29°C. SOR/94-263, s. 23(F).

**9.10** (1) In each personal service room and food preparation area, the floors, partitions and walls shall be so constructed that they can be easily washed and maintained in a sanitary condition.

(2) The floor and lower 150 mm of any walls and partitions in any food preparation area or toilet room shall be water-tight and impervious to moisture. SOR/94-263, s. 24(E).

**9.11** Where separate personal service rooms are provided for employees of each sex, each room shall be equipped with a door that is self-closing and is clearly marked to indicate the sex of the employees for whom the room is provided.

### *Toilet Rooms*

**9.12** (1) Where it is reasonably practicable, a toilet room shall be provided for employees and, subject to section 9.13, where persons of both sexes are employed at the same work place, a separate toilet room shall be provided for employees of each sex.

(2) Subject to subsections (3) and (4), where a toilet room is provided in accordance with subsection (1), the employer shall provide in that room a number of toilets determined according to the maximum number of employees of each sex who are normally employed by him at any one time at the same work place as follows:

(a) where the number of such employees does not exceed nine, one toilet;

(b) where the number of such employees exceeds nine but does not exceed 24, two toilets;

(c) where the number of such employees exceeds 24 but does not exceed 49, three toilets;

(d) where the number of such employees exceeds 49 but does not exceed 74, four toilets;

(e) where the number of such employees exceeds 74 but does not exceed 100, five toilets; and

(f) where the number of such employees exceeds 100, five toilets and one toilet for every 30 such employees or portion of that number in excess of 100.

(3) Subject to subsection (4), where the class of employment in a work place is the transaction of business or the rendering of professional or personal services, the number of toilets provided by the employer in accordance with subsection (2) may be reduced

(a) where the number of employees of each sex does not exceed 25, to one toilet;

(b) where the number of employees of each sex exceeds 25 but does not exceed 50, to two toilets; and

(c) where the number of employees of each sex exceeds 50, to three toilets and one toilet for every 50 employees or portion of that number in excess of 50.

(4) An employer may substitute urinals for up to two-thirds of the number of toilets required by subsection (2) or (3) to be provided for male employees.

(5) For the purposes of subsections (2) and (3), an employee who is normally away from his work place for more than 75 per cent of his working time and does not normally use the toilet room in the work place shall not be counted.

(6) Where reasonably practicable, toilet rooms and wash basins separate from those used by other employees shall be provided for food handlers. SOR/88-632, s. 29(F).

**9.13** (1) Subject to subsection (2), an employer may provide only one toilet for both male and female employees if

(a) the total number of employees normally employed by him in the work place at any one time does not exceed five; and

(b) the door of the toilet room is fitted on the inside with a locking device.

(2) Where the class of employment in a work place is the transaction of business or the rendering of professional or personal services, the employer may provide only one toilet for

both male and female employees if

(a) the total number of employees normally employed by him in the work place at any one time does not exceed 10 or the area of the work place does not exceed 100 m<sup>2</sup>; and

(b) the door of the toilet room is fitted on the inside with a locking device. SOR/88-632, s. 30(F).

**9.14** Toilet rooms shall be located not more than 60 m from and not more than one storey above or below each work place.

**9.15** Every toilet room shall be so designed that

(a) it is completely enclosed with solid material that is non-transparent from the outside;

(b) no toilet or urinal is visible when the door of the toilet room is open;

(c) it has a ceiling height of not less than 2.2 m;

(d) where the toilet room contains more than one toilet, each toilet is enclosed in a separate compartment fitted with a door and an inside locking device; and

(e) the walls of each separate toilet compartment are designed and constructed to provide a reasonable amount of privacy for its occupant.

**9.16** Toilet paper on a holder or in a dispenser shall be provided

(a) where there is only one toilet in a toilet room, in that toilet room; and

(b) in each toilet compartment.

**9.17** A covered container for the disposal of sanitary napkins shall be provided in each toilet room provided for the use of female employees.

### *Wash Basins*

**9.18** Hot water provided for personal washing

(a) shall be maintained at a temperature of not less than 35°C and not more than 43°C; and

(b) shall not be heated by mixing with steam.

**9.19** (1) Subject to sections 9.20 and 9.21, every employer shall provide for each toilet room wash basins supplied with cold water and hot water that meets the requirements of section 9.18 as follows:

(a) where the room contains one or two toilets or urinals, one wash basin; and

(b) where the room contains more than two toilets or urinals, one wash basin for every two toilets or urinals.

(2) Where an outdoor privy is provided by an employer, the employer shall provide wash basins required by subsection (1) as close to the outdoor privy as is reasonably practicable. SOR/88-632, s. 31; SOR/94-263, s. 25(F).

**9.20** Subject to section 9.21, where a toilet room is provided and the work environment of employees is such that their health is likely to be endangered by a hazardous substance coming into contact with their skin, the employer shall provide a wash room with individual wash basins supplied with cold water and hot water that meets the requirements of section 9.18 as follows:

(a) where the number of those employees does not exceed five, one wash basin;

(b) where the number of those employees exceeds five but does not exceed 10, two wash basins;

(c) where the number of those employees exceeds 10 but does not exceed 15, three wash basins;

(d) where the number of those employees exceeds 15 but does not exceed 20, four wash basins; and

(e) where the number of those employees exceeds 20, four wash basins and one additional wash basin for every 15 of those employees or portion of that number in excess of 20. SOR/88-68, s. 14; SOR/88-632, s. 32(F); SOR/94-263, s. 65(F).

**9.21** (1) An industrial wash trough or circular wash basin of a capacity equivalent to the aggregate of the minimum standard capacities of the wash basins referred to in sections 9.19 and 9.20 may be provided in place of the wash basins.

(2) An industrial wash trough or circular wash basin referred to in subsection (1) shall be supplied with cold water and hot water that meets the requirements of section 9.18. SOR/94-263, s. 26.

**9.22** In every personal service room that contains a wash basin, the employer shall provide

- (a) powdered or liquid soap or other cleaning agent in a dispenser at each wash basin or between adjoining wash basins;
- (b) sufficient sanitary hand drying facilities to serve the number of employees using the personal service room; and
- (c) a non-combustible container for the disposal of used towels where towels are provided.

### *Showers and Shower Rooms*

**9.23** (1) A shower room with a door fitted on the inside with a locking device and at least one shower head for every 10 employees or portion of that number shall be provided for employees who regularly perform strenuous physical work in a high temperature or high humidity or whose bodies may be contaminated by a hazardous substance.

(2) Every shower receptor shall be constructed and arranged in such a way that water cannot leak through the walls or floors.

(3) No more than six shower heads shall be served by a single shower drain.

(4) Where two or more shower heads are served by a shower drain, the floor shall be sloped and the drain so located that water from one head cannot flow over the area that serves another head.

(5) Except for column showers, where a battery of shower heads is installed, the horizontal distance between two adjacent shower heads shall be at least 750 mm.

(6) Waterproof finish shall be provided to a height of not less than 1.8 m above the floor in shower rooms and shall consist of ceramic, plastic or metal tile, sheet vinyl, tempered hardboard, laminated thermosetting decorative sheets or linoleum.

(7) Finished flooring in shower rooms shall consist of resilient flooring, felted-synthetic fibre floor coverings, concrete terrazzo, ceramic tile, mastic or other types of flooring providing similar degrees of water resistance.

(8) Where duck boards are used in showers, they shall not be made of wood.

(9) Every shower shall be provided with cold water and hot water that meets the requirements of section 9.18.



(10) Where an employee referred to in subsection (1) takes a shower as a result of his work, a clean towel and soap or other cleaning agent shall be provided to him. SOR/88-68, s. 14; SOR/88-632, s. 33(F); SOR/94-263, s. 65(F).

### *Potable Water*

**9.24** Every employer shall provide potable water for drinking, personal washing and food preparation that meets the standards set out in the Guidelines for Canadian Drinking Water Quality 1978, published by authority of the Minister of National Health and Welfare.

**9.25** Where it is necessary to transport water for drinking, personal washing or food preparation, only sanitary portable water containers shall be used.

**9.26** Where a portable storage container for drinking water is used,

- (a) the container shall be securely covered and closed;
- (b) the container shall be used only for the purpose of storing potable water;
- (c) the container shall not be stored in a toilet room; and
- (d) the water shall be drawn from the container by
  - (i) a tap,
  - (ii) a ladle used only for the purpose of drawing water from the container, or
  - (iii) any other means that precludes the contamination of the water.

**9.27** Except where drinking water is supplied by a drinking fountain, sanitary single-use drinking cups shall be provided.

**9.28** Any ice that is added to drinking water or used for the contact refrigeration of foodstuffs shall

- (a) be made from potable water; and
- (b) be so stored and handled as to prevent contamination.

**9.29** Where drinking water is supplied by a drinking fountain, the fountain shall meet the standards set out in ARI Standard 1010-82, Standard for Drinking-Fountains and Self-

*Field Accommodation*

**9.30** All field accommodation shall meet the following standards:

- (a) it shall be located on well-drained ground;
- (b) it shall be so constructed that it can easily be cleaned and disinfected;
- (c) the food preparation area and lunch room shall be separated from the sleeping quarters;
- (d) where a water plumbing system is provided, the system shall operate under sanitary conditions;
- (e) garbage disposal facilities shall be provided to prevent the accumulation of garbage;
- (f) toilet rooms shall be maintained in a sanitary condition; and
- (g) vermin prevention, heating, ventilation and sanitary sewage systems shall be provided. SOR/94-263, s. 27(F).

**9.31** (1) Living quarters provided

- (a) in any fixed accommodation shall comprise
  - (i) for a single occupant, a space of at least 18 m<sup>3</sup>, and
  - (ii) where there is more than one occupant, 18 m<sup>3</sup> plus 12 m<sup>3</sup> for each additional occupant; and
- (b) in any mobile accommodation shall comprise
  - (i) for a single occupant, a space of at least 12 m<sup>3</sup>, and
  - (ii) where there is more than one occupant, 12 m<sup>3</sup> plus 8 m<sup>3</sup> for each additional occupant.

(2) The living quarters referred to in subsection (1) shall have no floor dimension that is less than 1.5 m.

(3) Toilet rooms and locker rooms shall not be counted in the calculation made in accordance with subsection (1). SOR/88-632, s. 34(F).

**9.32** (1) All mobile accommodation shall meet the standards set out in CSA Standard Z240.2.1-1979, Structural Requirements for Mobile Homes, dated September, 1979, as amended to April, 1984.

(2) For the purposes of clause 4.12.4 of the Standard referred to in subsection (1), there is no other approved method.

**9.33** In any field accommodation provided as sleeping quarters for employees

(a) a separate bed or bunk shall be provided for each employee;

(b) the beds or bunks shall not be more than double-tiered and shall be so constructed that they can be cleaned and disinfected;

(c) mattresses, sheets, pillow cases, blankets and bed covers shall be provided for each employee and kept in a clean and sanitary condition;

(d) clean laundered sheets and pillow cases shall be provided for each employee at least once each week; and

(e) at least one shelf and a locker fitted with a locking device shall be provided for each employee.

### *Preparation, Handling, Storage and Serving of Food*

**9.34** (1) Each food handler shall be instructed and trained in food handling practices that prevent the contamination of food.

(2) No person who is suffering from a communicable disease shall work as a food handler.

**9.35** Where food is served in a work place, the employer shall adopt and implement Section G of the Sanitation Code for Canada's Foodservice Industry published by the Canadian Restaurant and Foodservices Association, dated September, 1984, other than items 2 and 11 thereof.

**9.36** (1) Where foods stored by an employer for consumption by employees require refrigeration to prevent them from becoming hazardous to health, the foods shall be maintained at a temperature of 4°C or lower.

(2) Where foods stored by an employer for consumption by employees require freezing to prevent them from becoming hazardous to health, the foods shall be maintained at a temperature of -11°C or lower. SOR/88-632, s. 35.

**9.37** All equipment and utensils that come into contact with food shall be

- (a) designed to be easily cleaned;
- (b) smooth, free from cracks, crevices, pitting or unnecessary indentations; and
- (c) cleaned to maintain their surfaces in a sanitary condition.

**9.38** No person shall eat, prepare or store food

- (a) in a place where a hazardous substance may contaminate food, dishes or utensils;
- (b) in a personal service room that contains a toilet, urinal or shower; or
- (c) in any other place where food is likely to be contaminated. SOR/88-68, s. 14.

### *Food Waste and Garbage*

**9.39** (1) No food waste or garbage shall be stored in a food preparation area.

(2) Food waste and garbage shall be handled and removed from a food preparation area or lunch room in accordance with subsections (3) to (5).

(3) Wet food waste and garbage shall be

(a) disposed of by mechanical grinders or choppers connected to sewage disposal lines;  
or

(b) held in leak-proof, non-absorptive, easily-cleaned containers with tight-fitting covers in a separate enclosed area or container until removal for disposal.

(4) Dry food waste and garbage shall be removed or incinerated.

(5) Food waste and garbage containers shall be kept covered and the food waste and garbage removed as frequently as is necessary to prevent unsanitary conditions.

(6) Food waste and garbage containers shall, each time they are emptied, be cleansed and

disinfected in an area separate from the food preparation area. SOR/88-632, s. 36(F).

### *Lunch Rooms*

**9.40** Every lunch room provided by the employer

- (a) shall be separated from any place where a hazardous substance may contaminate food, dishes or utensils;
- (b) shall not be used for any purpose that is incompatible with its use as a lunch room;
- (c) shall not have any dimension of less than 2.3 m;
- (d) shall have a minimum floor area of 9 m<sup>2</sup>;
- (e) shall have 1.1 m<sup>2</sup> of floor area for each of the employees who normally use the room at any one time;
- (f) shall be furnished with a sufficient number of tables and chairs to accommodate adequately the number of employees normally using the lunch room at any one time; and
- (g) shall be provided with non-combustible covered receptacles for the disposal of waste food or other waste material. SOR/88-632, s. 37(F).

### *Ventilation*

**9.41** (1) Each personal service room and food preparation area shall be ventilated to provide at least two changes of air per hour

- (a) by mechanical means, where the room is normally used by 10 or more employees at any one time; or
- (b) by mechanical means or natural ventilation through a window or similar opening, where the room is used by fewer than 10 employees if
  - (i) the window or similar opening is located on an outside wall of the room, and
  - (ii) not less than 0.2 m<sup>2</sup> of unobstructed ventilation is provided for each of the employees who normally use the room at any one time.

(2) Where an employer provides ventilation by mechanical means in accordance with

paragraph (1)(a), the amount of air provided for a type of room set out in Column I of an item of the schedule to this Part shall be not less than that set out in Column II of that item.

(3) Where an employer provides for the ventilation of a food preparation area or a lunch room by mechanical means in accordance with paragraph (1)(a), the rate of change of air shall be not less than nine litres per second for each employee who is normally employed in the food preparation area at any one time or for each employee who uses the lunch room at any one time. SOR/88-632, s. 38(F).

**9.42** (1) Subject to subsection (2), any exhaust system from a personal service room containing a toilet or a shower shall not be connected with any other exhaust or air supply system.

(2) The exhaust system for a personal service room containing a toilet or shower may be connected with the exhaust duct of another room at the exhaust fan inlet if the system is connected in such a manner that an exchange of air cannot occur between the rooms. SOR/88-632, s. 39.

### *Clothing Storage*

**9.43** Clothing storage facilities shall be provided by the employer for the storage of overcoats and outer clothes not worn by employees while they are working.

**9.44** (1) A change room shall be provided by the employer where

(a) the nature of the work engaged in by an employee makes it necessary for that employee to change from street clothes to work clothes for safety or health reasons; or

(b) an employee is regularly engaged in work in which his work clothing becomes wet or contaminated by a hazardous substance.

(2) Where wet or contaminated work clothing referred to in paragraph (1)(b) is changed, it shall be stored in such a manner that it does not come in contact with clothing that is not wet or contaminated.

(3) No employee shall leave the work place wearing clothing contaminated by a hazardous substance.

(4) Every employer shall supply drying and cleaning facilities for the purpose of drying or cleaning wet or contaminated clothing referred to in paragraph (1)(b).

(5) In each change room,

(a) a floor area of at least 0.4 m<sup>2</sup> shall be provided for each of the employees who normally use the room at any one time; and

(b) where it is necessary for the employees to change footwear, seats shall be provided in sufficient numbers to accommodate them. SOR/88-68, s. 14; SOR/88-632, s. 40(F); SOR/94-263, s. 28(F).

**9.45** To the extent that is reasonably practicable, the clothing storage facilities referred to in section 9.43 and the change room referred to in section 9.44 shall be located

(a) near the work place and connected thereto by a completely covered route;

(b) on a direct route to the entrance to the work place;

(c) near a shower room provided pursuant to section 9.23; and

(d) near a toilet room.

## SCHEDULE

*(Subsection 9.41(2))*

### MINIMUM VENTILATION REQUIREMENTS FOR CHANGE ROOMS, TOILET ROOMS AND SHOWER ROOMS

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Column I

Column II

Ventilation

Requirements in

Item                      litres per second  
Type of Room

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1.                              Change Room

(a)for employees with clean work clothes

(a)5 L/s per m<sup>2</sup> of floor area

(b)for employees with wet or sweaty work clothes

(b)10 L/s per m<sup>2</sup> of floor area; 3 L/s exhausted from each locker

(c)for employees who work where work clothes pick up heavy odours

(c)15 L/s per m<sup>2</sup> of floor area; 4 L/s exhausted from each locker

- |    |             |   |
|----|-------------|---|
| 2. | Toilet Room | 10 L/s per m <sup>2</sup> of floor area; at least 10 L/s per toilet compartment; minimum 90 L/s |
| 3. | Shower Room | 10 L/s per m <sup>2</sup> of floor area; at least 20 L/s per shower head; minimum 90 L/s        |

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SOR/88-632, s. 41(F).

## PART X HAZARDOUS SUBSTANCES

### *Interpretation*

#### 10.1 In this Part,

"airborne chrysotile asbestos" means airborne fibres longer than 5 micrometers ( $\mu\text{m}$ ) with an aspect ratio equal to or greater than 3:1; (*fibres de chrysotile aéroportées*)

"hazard information", in respect of a hazardous substance, means information on the proper and safe storage, handling, use and disposal of the hazardous substance, including information relating to its toxicological properties; (*renseignements sur les risques*)

"product identifier", in respect of a hazardous substance, means the brand name, code name or code number specified by the supplier or employer or the chemical name, common name, generic name or trade name; (*identificateur du produit*)

"readily available" means present in an appropriate place in a physical copy form that can



be handled; (*facilement accessible*)

"supplier" means a person who is a manufacturer, processor or packager of a hazardous substance or a person who, in the course of business, imports or sells a hazardous substance. (*fournisseur*) SOR/96-294, s. 2.

### *Application*

**10.2** This Part does not apply to the handling or transportation of dangerous goods to which the *Transportation of Dangerous Goods Act, 1992* and regulations made thereunder apply. SOR/88-68, ss. 5, 14; SOR/94-263, s. 29; SOR/96-294, s. 2.

## DIVISION I GENERAL

### *Records of Hazardous Substances*

**10.3** Every employer shall keep and maintain a record of all hazardous substances that, in the work place, are used, produced, handled, or stored for use in the work place, and may either keep and maintain such a record in the work place or keep and maintain a centralized record in respect of several work places, in one work place. SOR/94-263, s. 30; SOR/96-294, s. 2.

### *Hazard Investigation*

**10.4** (1) Where there is a likelihood that the safety or health of an employee in a work place is or may be endangered by exposure to a hazardous substance, the employer shall, without delay,

(a) appoint a qualified person to carry out an investigation in that regard; and

(b) for the purposes of providing for the participation of the safety and health committee or safety and health representative, if either exists, in the investigation, notify either of the proposed investigation and of the name of the qualified person appointed to carry out that investigation.

(2) In an investigation referred to in subsection (1), the following criteria shall be taken into consideration:

(a) the chemical, biological and physical properties of the hazardous substance;

- (b) the routes of exposure to the hazardous substance;
- (c) the acute and chronic effects on health of exposure to the hazardous substance;
- (d) the quantity of the hazardous substance to be handled;
- (e) the manner in which the hazardous substance is stored, used, handled and disposed of;
- (f) the control methods used to eliminate or reduce exposure of employees to the hazardous substance;
- (g) the concentration or level of the hazardous substance to which an employee is likely to be exposed;
- (h) whether the concentration of an airborne chemical agent or the level of ionizing or non-ionizing radiation is likely to exceed 50 per cent of the values referred to in subsection 10.19(1) or the levels referred to in subsections 10.26(3) and (4); and
- (i) whether the level referred to in paragraph (g) is likely to exceed or be less than that prescribed in Part VI. SOR/96-294, s. 2.

**10.5** On completion of an investigation referred to in subsection 10.4(1) and after consultation with the safety and health committee or the safety and health representative, if either exists,

- (a) the qualified person shall set out in a written report signed by the qualified person
  - (i) the qualified person's observations respecting the criteria considered in accordance with subsection 10.4(2), and
  - (ii) the qualified person's recommendations respecting the manner of compliance with sections 10.7 to 10.26, including recommendations respecting sampling and testing methods; and
- (b) the employer shall develop and maintain a written procedure for the control of the concentration or level of the hazardous substance in the work place. SOR/88-68, s. 14; SOR/94-263, s. 31; SOR/96-294, s. 2.

**10.6** A report referred to in section 10.5 shall be kept by the employer for a period of thirty years after the date on which the qualified person signed the report. SOR/88-68, s. 14; SOR/96-294, s. 2.

## *Medical Examinations*

- 10.7** (1) Where a report referred to in section 10.5 recommends a medical examination for the employees likely to be exposed to a hazardous substance, the employer shall consult a physician to ascertain the necessity for that medical examination.
- (2) The employer, having consulted a physician pursuant to subsection (1) who has confirmed the necessity for a medical examination, shall not permit an employee to handle the hazardous substance in the work place unless a physician acceptable to the employee has examined the employee and declared the employee fit, or fit with specified restrictions, to handle the hazardous substance.
- (3) Where the physician examining an employee pursuant to subsection (2) declares the employee fit with specified restrictions to handle the hazardous substance, the employer shall not permit the employee to handle the hazardous substance in the work place except in accordance with the specified restrictions.
- (4) Where an employer consults a physician pursuant to subsection (1), the employer shall keep a copy of the physician's decision with the report referred to in section 10.5.
- (5) The cost of a medical examination referred to in subsection (2) shall be borne by the employer. SOR/88-68, s. 14; SOR/96-294, s. 2.

## *Storage, Handling and Use*

- 10.8** Every hazardous substance stored, handled or used in a work place shall be stored, handled or used in a manner whereby the hazard related to that substance is reduced to a minimum. SOR/88-68, s. 14; SOR/96-294, s. 2.
- 10.9** Where a hazardous substance is stored, handled or used in a work place, any hazard resulting from that storage, handling or use shall be confined to as small an area as is practicable. SOR/88-68, s. 14; SOR/94-263, s. 32(F); SOR/96-294, s. 2.
- 10.10** Every container for a hazardous substance that is used in a work place shall be so designed and constructed that it protects the employees from any safety or health hazard that is caused by the hazardous substance. SOR/88-68, s. 14; SOR/88-632, s. 42(F); SOR/94-263, s. 33; SOR/96-294, s. 2.
- 10.11** The quantity of a hazardous substance for use or processing in a work place shall, to the extent that is practicable, be limited to the quantity required for one work day. SOR/88-68, s. 14; SOR/96-294, s. 2.

**10.12** (1) Where, in a work place, a hazardous substance is capable of combining with another substance to form an ignitable combination and there exists a hazard of ignition of the combination by static electricity, the employer shall implement the standards set out in the United States National Fire Protection Association, Inc. publication NFPA 77, *Recommended Practice on Static Electricity*, dated 1988, as amended from time to time.

(2) For the purpose of interpreting the standards referred to in subsection (1), "acceptable" means "appropriate". SOR/88-68, s. 14; SOR/88-632, s. 43; SOR/94-263, s. 34; SOR/96-294, s. 2.

### *Warning of Hazardous Substances*

**10.13** Where a hazardous substance is stored, handled or used in a work place, warnings shall be given in appropriate places at access points warning every person granted access to the work place of the presence of the hazardous substance and of any precautions to be taken to prevent or reduce any hazard of injury to health. SOR/88-68, ss. 6, 14; SOR/96-294, s. 2; SOR/96-525, s. 14.

### *Employee Education*

**10.14** (1) Every employer shall, in consultation with the safety and health committee or the safety and health representative, if either exists, develop and implement an employee education program with respect to hazard prevention and control at the work place.

(2) The employee education program referred to in subsection (1) shall include

(a) the instruction of each employee who is likely to handle or be exposed to a hazardous substance with respect to

(i) the product identifier of the hazardous substance,

(ii) all hazard information disclosed by the supplier or by the employer on a material safety data sheet or label,

(iii) all hazard information of which the employer is aware or ought reasonably to be aware,

(iv) the observations referred to in subparagraph 10.5(a)(i),

(v) the information disclosed on a material safety data sheet referred to in section

10.28 and the purpose and significance of that information, and

(vi) in respect of controlled products in the work place, the information required to be disclosed on a material safety data sheet and on a label under Division III and the purpose and significance of that information;

(b) the instruction and training of each employee who installs, operates, maintains or repairs an assembly of pipes or any other equipment referred to in section 10.24, with respect to

(i) every valve and other control and safety device connected to the assembly of pipes, and

(ii) the procedures to follow for the proper and safe use of the assembly of pipes;

(c) the instruction and training of each employee referred to in paragraphs (a) and (b) with respect to

(i) the procedures to follow to implement sections 10.8, 10.9 and 10.12, and

(ii) the procedures to follow for the safe storage, handling, use and disposal of hazardous substances, including procedures to be followed in an emergency involving a hazardous substance; and

(d) where the employer keeps a computerized version of a material safety data sheet available in accordance with subsection 10.34(2), the instruction and training referred to in paragraph 10.34(2)(b) in accessing that material safety data sheet.

(3) Every employer shall, in consultation with the safety and health committee or the safety and health representative, if either exists, review the employee education program referred to in subsection (1) and if necessary, revise it

(a) at least once a year;

(b) whenever there is a change in conditions in respect of the hazardous substances in the work place; and

(c) whenever new hazard information in respect of a hazardous substance in the work place becomes available to the employer. SOR/96-294, s. 2.

**10.15** The employer shall keep a written or computerized record of the instruction and training given to every employee and

(a) make it readily available for examination by the employee; and

(b) keep it for a period of two years after the employee ceases

(i) to handle or be exposed to the hazardous substance, or

(ii) to install, operate, maintain or repair the assembly of pipes. SOR/96-294, s. 2.

### *Substitution of Substances*

**10.16** (1) No person shall use a hazardous substance in a work place where it is reasonably practicable to substitute a substance for it that is not a hazardous substance.

(2) Where a hazardous substance is to be used for any purpose in a work place and an equivalent substance that is less hazardous is available to be used for that purpose, the equivalent substance shall be substituted for the hazardous substance where reasonably practicable. SOR/88-68, ss. 8, 14; SOR/88-632, s. 44(F); SOR/96-294, s. 2.

### *Ventilation*

**10.17** (1) Every ventilation system installed on or after January 1, 1997 to control the concentration of an airborne hazardous substance shall be so designed, constructed, installed, operated and maintained that

(a) the concentration of the airborne hazardous substance does not exceed the values and levels prescribed in subsections 10.19(1) and 10.20(1) and (2); and

(b) it meets the standards set out in

(i) Part 6 of the National Building Code,

(ii) the publication of the American Conference of Governmental Industrial Hygienists entitled *Industrial Ventilation*, 20th edition, dated 1988, as amended from time to time, or

(iii) ANSI Standard ANSI Z9.2-1979 entitled *Fundamentals Governing the Design and Operation of Local Exhaust Systems*, dated 1979, as amended from time to time.

(2) To the extent that is reasonably practicable, every ventilation system installed before January 1, 1997 to control the concentration of an airborne hazardous substance shall be maintained so as to meet the requirements set out in subsection (1). SOR/88-68, s. 9; SOR/94-

**10.18** (1) Before a ventilation system referred to in subsection 10.17(1) is operated for the first time in a work place, the employer shall set out in writing instructions pertaining to the inspection, testing and maintenance of that ventilation system.

(2) The instructions referred to in subsection (1) shall specify the nature and frequency of inspections, tests and maintenance to be performed on the ventilation system.

(3) The employer shall ensure that a qualified person

(a) carries out each inspection, testing and maintenance of the ventilation system in accordance with the instructions referred to in subsection (1); and

(b) makes and signs a report with respect to each inspection, test or maintenance work.

(4) A report referred to in paragraph (3)(b) shall

(a) include the date of the inspection, test or maintenance work performed by the qualified person;

(b) identify the ventilation system that was inspected, tested or maintained; and

(c) set out the safety observations of the qualified person in respect of the ventilation system.

(5) The employer shall keep at the work place at which the ventilation system is located a copy of

(a) the instructions referred to in subsection (1), and

(b) the most recent report referred to in paragraph (3)(b).

(6) The employer shall give to every operator of a ventilation system the necessary instruction and training for the safe and proper use of the system.

(7) The employer shall keep a written or computerized record of the instruction and training given to every operator of a ventilation system for as long as the operator remains in the employer's employ. SOR/96-294, s. 2.

**10.19** (1) An employee shall be kept free from exposure to a concentration of

(a) an airborne chemical agent, other than grain dust or airborne chrysotile asbestos, in excess of the value for that chemical agent adopted by the American Conference of Governmental Industrial Hygienists, in its publication entitled *Threshold Limit Values and Biological Exposure Indices*, dated 1994-1995, as amended from time to time;

(b) airborne grain dust in excess of 10 mg/m<sup>3</sup>; or

(c) airborne chrysotile asbestos in excess of one fibre per cubic centimetre.

(2) Subsection (1) does not apply in respect of concentrations of carbon dioxide or respirable dust in the underground portion of a coal mine.

(3) Where there is a likelihood that the concentration of an airborne chemical agent may exceed the value referred to in subsection (1), air samples shall be taken and the concentration of the chemical agent shall be determined

(a) in accordance with the standards set out by the American Conference of Governmental Industrial Hygienists in its publication entitled *Manual of Analytical Methods Recommended for Sampling and Analysis of Atmospheric Contaminants*, dated 1958, as amended from time to time;

(b) in accordance with the standards set out by the United States National Institute for Occupational Safety and Health in the *NIOSH Manual of Analytical Methods*, third edition, volumes 1 and 2, dated February, 1984, as amended from time to time;

(c) in accordance with a method that collects and analyses a representative sample of the chemical agent with accuracy and with detection levels at least equal to those which would be obtained if the standards referred to in paragraph (a) or (b) were used; or

(d) where no specific standards for the chemical agent are set out in the publications referred to in paragraphs (a) and (b) and no method is available under paragraph (c), in accordance with a scientifically proven method used to collect and analyse a representative sample of the chemical agent.

(4) A written or computerized record of each test made pursuant to subsection (3) shall be kept by the employer at the employer's place of business nearest to the work place where the air sample was taken, for a period of three years after the date of the test.

(5) A record referred to in subsection (4) shall include

(a) the date, time and location of the test;



(b) the hazardous substance in respect of which the test was made;

(c) the sampling and testing method used;

(d) the result obtained; and

(e) the name and occupation of the person who made the test. SOR/88-68, ss. 10, 14; SOR/94-263, s. 37(F); SOR/96-294, s. 2; SOR/98-427, s. 5.

**10.20** (1) Subject to subsection (2), the concentration of an airborne chemical agent or combination of airborne chemical agents in the work place shall be less than 50 per cent of the lower explosive limit of the chemical agent or combination of chemical agents.

(2) Where a source of ignition may ignite an airborne chemical agent or combination of airborne chemical agents in the work place, the maximum concentration of the chemical agent or of the combination of chemical agents shall be 10 per cent of the lower explosive limit of the chemical agent or combination of chemical agents.

(3) Subsection (2) does not apply in respect of concentrations of methane gas in the underground portion of a coal mine. SOR/88-68, ss. 11(E), 14(F); SOR/96-294, s. 2.

**10.21** (1) Compressed air, gas or steam shall not be used for blowing dust or other substances from structures, machinery or materials where

(a) there is a risk of any person being directly exposed to the jet or where a fire, explosion, injury or health hazard is likely to result from such use; or

(b) such use would result in a concentration of an airborne hazardous substance in excess of the values referred to in paragraphs 10.19(1)(a) and (c) or the limits referred to in subsections 10.20(1) and (2). SOR/88-68, s. 14; SOR/88-632, s. 46(F); SOR/90-180, s. 1; SOR/96-294, s. 2; SOR/98-427, s. 6.

**10.22** (1) Compressed air shall not be used for cleaning clothing contaminated with:

(a) asbestos; or

(b) a hazardous substance having an exposure limit referred to in paragraph 10.19(1)(a) or (b) lower than 1 mg/m<sup>3</sup>.

(2) Where compressed air is used to clean clothing,

(a) appropriate eye protection shall be worn; and

(b) the maximum compressed air pressure in the pipeline shall be 69 kPa (10 psi) or a safety nozzle limiting the air pressure to no more than 69kPa (10 psi) shall be used. SOR/88-632, s. 47; SOR/90-180, s. 2; SOR/96-294, s. 2.

### *Warnings*

**10.23** Where reasonably practicable, the employer shall provide automated warning and detection systems where the seriousness of any exposure to a hazardous substance so requires. SOR/88-68, s. 14; SOR/96-294, s. 2.

### *Assembly of Pipes*

**10.24** Every assembly of pipes, pipe fittings, valves, safety devices, pumps, compressors and other fixed equipment that is used for transferring a hazardous substance from one location to another shall be

(a) labelled to identify the hazardous substance transferred therein and, where appropriate, the direction of the flow; and

(b) fitted with valves and other control and safety devices to ensure its safe operation, maintenance and repair. SOR/96-294, s. 2.

### *Explosives*

**10.25** All blasting using dynamite or other explosives shall be done by a qualified person who, where required under the laws of the province in which the blasting is carried out, holds a blasting certificate or such other authorization as may be required under those laws. SOR/96-294, s. 2.

### *Ionizing and Non-ionizing Radiation*

**10.26** (1) Where a device that is capable of producing and emitting energy in the form of ionizing or non-ionizing radiation is used in the work place, the employer shall

(a) if the device is listed in the schedule to this Division, make a report in writing to the Bureau of Radiation and Medical Devices of the Department of National Health and Welfare, setting out a description of the device and the location of the work place; and

(b) if the device is referred to in subsection (2), implement the applicable document, as amended from time to time, published by the Department of National Health and Welfare, as specified in one of paragraphs (2)(a) to (k) or published by ANSI, as specified in paragraph (2)(l).

(2) For the purposes of paragraph (1)(b), the applicable document is

(a) in respect of radio frequency and microwave devices in the frequency range from 10 kHz to 300 GHz, *Safety Code - 6*, dated 1990;

(b) in respect of X-ray equipment in medical diagnosis, *Safety Code - 20A*, dated 1980;

(c) in respect of baggage inspection X-ray equipment, *Safety Code - 21*, dated 1978;

(d) in respect of dental X-ray equipment, *Safety Code - 22*, dated 1980;

(e) in respect of ultrasound equipment, *Safety Code - 23*, dated 1989, and *Safety Code - 24*, dated 1990;

(f) in respect of short-wave diathermy equipment, *Safety Code - 25*, dated 1983;

(g) in respect of magnetic resonance imaging and magnetic resonance spectroscopy equipment, *Safety Code - 26*, dated 1987;

(h) in respect of industrial X-ray equipment, *Safety Code - 27*, dated 1987;

(i) in respect of veterinary X-ray equipment, *Safety Code - 28*, dated 1991;

(j) in respect of demonstration-type discharge devices, *Recommended Safety Procedures for the Selection and Use of Demonstration-Type Discharge Devices in Schools*, dated 1979;

(k) in respect of dielectric (RF) heaters, *Dielectric (RF) Heaters Guidelines for Limiting Radio-Frequency Exposure*, dated 1980; and

(l) in respect of lasers, ANSI Standard ANSI Z136.1-1986, *American National Standard for the Safe Use of Lasers*, dated 1986, including its appendices with the exception of Appendix D.

(3) Where an employee works on or near a device that may emit ionizing radiation, the employer shall ensure that the exposure of the employee to ionizing radiation does not exceed the exposure limits set out in the *Atomic Energy Control Regulations*.

(4) No employee, other than an atomic radiation worker as defined in the *Atomic Energy Control Regulations*, shall be exposed in the course of any year to a concentration of radon that on average, over the year, is higher than 800 Bq/m<sup>3</sup>. SOR/88-68, s. 12; SOR/96-294, s. 2.

**SCHEDULE**  
*(Paragraph 10.26(1)(a))*  
**DEVICES TO BE REPORTED TO THE BUREAU OF RADIATION AND  
MEDICAL DEVICES**

Item Device

1. Dental X-ray Equipment
2. Baggage Inspection X-ray Equipment
3. Demonstration-Type Gas Discharge Device
4. Photofluorographic X-ray Equipment
5. Electron Microscopes
6. Diagnostic X-ray Equipment
7. X-ray Diffraction Equipment
8. Cabinet X-ray Equipment
9. Therapeutic X-ray Equipment
10. Industrial X-ray Radiography and Fluoroscopy Equipment
11. Analytical X-ray Equipment
12. X-ray Spectrometer
13. X-ray Equipment Used for Irradiation of Materials

14. Electron Welding Equipment
15. Electron Processor
16. Accelerator
17. X-ray Gauge
18. Laser Scanner
19. Demonstration Laser
20. Sunlamp
21. Industrial Radiofrequency Heater and Sealer
22. Laser
23. Ultraviolet Polymerizer
24. Magnetic Resonance Imaging Devices
25. Induction Heater
26. Radar
27. Telecommunication Transmitter above 5 W
28. Nebulizer Ultrasound Equipment
29. Non-portable Ultrasonic Cleaner
30. Ultrasonic Machining Tool
31. Ultrasonic Welding Equipment
32. Airborne Ultrasound Pest Repeller

33. Short-wave Diathermy

34. Microwave Diathermy

SOR/96-294, s. 2.

## DIVISION II HAZARDOUS SUBSTANCES OTHER THAN CONTROLLED PRODUCTS

### *Identification*

**10.27** Every container of a hazardous substance, other than a controlled product, that is stored, handled, used or disposed of in the work place shall be labelled in a manner that discloses clearly

(a) the generic name of the substance; and

(b) the hazard information in respect of the substance. SOR/88-68, s. 12; SOR/96-294, s. 2.

**10.28** Where a material safety data sheet in respect of a hazardous substance, other than a controlled product, that is stored, handled or used in the work place may be obtained from the supplier of the hazardous substance, the employer shall

(a) obtain a copy of the material safety data sheet; and

(b) keep a copy of the material safety data sheet readily available in the work place for examination by employees. SOR/88-68, s. 12; SOR/96-294, s. 2.

## DIVISION III CONTROLLED PRODUCTS

### *Interpretation*

**10.29** In this Division,

"bulk shipment" means a shipment of a controlled product that is contained, without an

intermediate container or intermediate packaging, in

- (a) a tank with a water capacity of more than 454 L,
- (b) a freight container or a portable tank,
- (c) a road vehicle, railway vehicle or ship, or
- (d) a pipeline; (*expédition en vrac*)

"fugitive emission" means a controlled product in gas, liquid or solid form that escapes from processing equipment, from control emission equipment or from a product; (*émission fugitive*)

"hazardous waste" means a controlled product that is intended solely for disposal or is sold for recycling or recovery; (*résidu hasardeux*)

"laboratory sample", in respect of a controlled product, means a sample of the controlled product that is intended solely to be tested in a laboratory, but does not include a controlled product that is to be used

- (a) by the laboratory for testing other products, materials or substances, or
- (b) for educational or demonstration purposes; (*échantillon pour laboratoire*)

"manufactured article" means any article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, under normal conditions of use, will not release or otherwise cause a person to be exposed to a controlled product; (*article manufacturé*)

"research and development", in respect of a controlled product, means systematic investigation or search carried out in a field of science or technology by means of experiment or analysis, other than investigation or search in respect of market research, sales promotion, quality control or routine testing of controlled products, and includes

- (a) applied research, namely, work undertaken for the advancement of scientific knowledge with a specific practical application in view, and
- (b) development, namely, use of the results of applied research for the purpose of creating new, or improving existing, processes or controlled products; (*recherche et développement*)

"risk phrase", in respect of a controlled product, means a statement identifying a hazard

that may arise from the exposure to the controlled product; (*mention de risque*)

"sale" includes offer for sale, expose for sale and distribute; (*vente*)

"supplier label", in respect of a controlled product, means a label prepared by a supplier pursuant to the *Hazardous Products Act*; (*étiquette du fournisseur*)

"supplier material safety data sheet", in respect of a controlled product, means a material safety data sheet prepared by a supplier pursuant to the *Hazardous Products Act*; (*fiche signalétique du fournisseur*)

"work place label", in respect of a controlled product, means a label prepared by an employer pursuant to this Division; (*étiquette du lieu de travail*)

"work place material safety data sheet", in respect of a controlled product, means a material safety data sheet prepared by an employer pursuant to subsection 10.33(1) or (2). (*fiche signalétique du lieu de travail*) SOR/88-68, s. 12; SOR/96-294, s. 2.

### *Application*

**10.30** (1) This Division does not apply in respect of any

(a) wood or product made of wood;

(b) tobacco or product made of tobacco; or

(c) manufactured article.

(2) This Division, other than section 10.43, does not apply in respect of hazardous waste. SOR/88-68, s. 12; SOR/96-294, s. 2.

### *Material Safety Data Sheets and Labels in respect of Certain Controlled Products*

**10.31** (1) Subject to subsection (2) and section 10.42, every employer shall implement the provisions of sections 10.27 and 10.28 in respect of a controlled product and may, in so doing, replace the generic name of the substance with the product identifier, where the controlled product is a controlled product that

(a) is present in the work place;

(b) was received from a supplier; and



(c) is one of the following:

- (i) an explosive within the meaning of section 2 of the *Explosives Act*,
- (ii) a cosmetic, device, drug or food within the meaning of section 2 of the *Food and Drugs Act*,
- (iii) a control product within the meaning of section 2 of the *Pest Control Products Act*,
- (iv) a prescribed substance within the meaning of section 2 of the *Atomic Energy Control Act*, and
- (v) a product, material or substance included in Part II of Schedule I to the *Hazardous Products Act* that is packaged as a consumer product.

(2) An employer may store a controlled product received from a supplier without having a supplier label on it, without having obtained a material safety data sheet for it and without having conducted a program of employee education with respect to the matters referred to in subparagraphs 10.14(2)(a)(ii) and (c)(ii)

(a) while the employer is actively seeking a supplier label and a supplier material safety data sheet for the controlled product; and

(b) if labelling affixed to the container of the controlled product containing information on the controlled product is not removed, defaced, modified or altered. SOR/88-68, s. 12; SOR/94-263, s. 38; SOR/96-294, s. 2.

### *Supplier Material Safety Data Sheets*

**10.32** (1) Where a controlled product, other than a controlled product referred to in paragraph 10.31(1)(c), is received in the work place by an employer, the employer shall, without delay, obtain from the supplier of the controlled product a supplier material safety data sheet in respect of the controlled product, unless the employer is in possession of a supplier material safety data sheet that

(a) is for a controlled product that has the same product identifier;

(b) discloses information that is current at the time that the controlled product is received; and

(c) was prepared and dated not more than three years before the date that the controlled

product is received.

(2) Where there is a controlled product in a work place and the supplier material safety data sheet in respect of the controlled product is three years old or more, the employer shall, where possible, obtain from the supplier an up-to-date supplier material safety data sheet.

(3) Where it is not practicable for an employer to obtain an up-to-date supplier material safety data sheet, the employer shall update the hazard information on the most recent supplier material safety data sheet that the employer has received on the basis of the ingredients disclosed on that supplier material safety data sheet.

(4) Where a controlled product is received in a work place that is a laboratory, from a supplier who is exempted by the *Controlled Products Regulations* from the requirement to provide a material safety data sheet for that product, the employer is exempt from the requirements of subsection (1) if the controlled product

(a) originates from a laboratory supply house;

(b) is intended for use in a laboratory; and

(c) is packaged in a container in a quantity of less than 10 kg. SOR/88-68, s. 12; SOR/94-263, s. 39; SOR/96-294, s. 2; SOR/98-427, s. 7.

### *Work Place Material Safety Data Sheets*

**10.33** (1) Subject to section 10.42, where an employer produces a controlled product, other than a fugitive emission, in the work place or imports into Canada a controlled product and brings it into the work place, the employer shall prepare a work place material safety data sheet in respect of the controlled product that discloses the information required to be disclosed by

(a) paragraph 125.1(e) of the Act; and

(b) the *Controlled Products Regulations*.

(2) Subject to section 10.42, where an employer receives a supplier material safety data sheet, the employer may prepare a work place material safety data sheet to be used in the work place in place of the supplier material safety data sheet if

(a) the work place material safety data sheet discloses at least the information disclosed on the supplier material safety data sheet;

(b) the information disclosed on the work place material safety data sheet does not

disclaim or contradict the information disclosed on the supplier material safety data sheet;

(c) the supplier material safety data sheet is readily available for examination by employees in the work place; and

(d) the work place material safety data sheet discloses that the supplier material safety data sheet is available in the work place.

(3) Where an employer produces, in a work place that is a laboratory supply house, or imports into Canada and brings it into such a work place, a controlled product that is intended for use in a laboratory, the employer is exempted from the requirements of subsection (1) if the employer

(a) packages the controlled product in containers in quantities of less than 10 kg per container; and

(b) subject to section 10.42, discloses on the label of the container of the controlled product the information required to be disclosed by

(i) paragraph 125.1(e) of the Act, and

(ii) section 10.39.

(4) The employer shall update a work place material safety data sheet referred to in subsection (1) or (2) or a label referred to in paragraph (3)(b)

(a) as soon as practicable but not later than 90 days after new hazard information becomes available to the employer; and

(b) at least once every three years.

(5) Where the information required to be disclosed by this section is not available or not applicable to the controlled product, the employer shall replace the information with the words "not available" or "not applicable", as the case may be, in the English version and the words "pas disponible" or "sans objet", as the case may be, in the French version of the work place material safety data sheet. SOR/88-68, s. 12; SOR/94-263, s. 40; SOR/96-294, s. 2.

### *Availability of Material Safety Data Sheets*

**10.34** (1) Subject to subsection (2), every employer, other than an employer referred to in subsection 10.32(4), shall keep readily available for examination by employees and by the safety and health committee or the safety and health representative, if either exists, in any work place in which an employee may handle or be exposed to a controlled product, a copy in

English and in French of

(a) in the case of an employer who is an employer referred to in subsection 10.33(1) or (2), the work place material safety data sheet; and

(b) in any other case, the supplier material safety data sheet.

(2) In place of keeping a material safety data sheet in the manner required by subsection (1), an employer may keep a computerized version of the material safety data sheet available in English and in French for examination by employees and by the safety and health committee or the safety and health representative, if either exists, by means of a computer terminal if the employer

(a) takes all reasonable steps to maintain the terminal in working order;

(b) provides the instruction and training referred to in paragraph 10.14(2)(d) to one or more employees on each shift and to all members of the safety and health committee or the safety and health representative, if either exists; and

(c) on the request of an employee, the safety and health committee or the safety and health representative, makes the material safety data sheet readily available to the employee, the safety and health committee or the safety and health representative.  
SOR/88-68, s. 12; SOR/96-294, s. 2.

### *Labels*

**10.35** (1) Subject to sections 10.37 to 10.39, each controlled product, other than a controlled product referred to in paragraph 10.31(1)(c), in a work place and each container in which the controlled product is contained in a work place shall, if the controlled product or the container is received from a supplier,

(a) in the case where the controlled product is in a bulk shipment, be accompanied by a supplier label;

(b) in the case where the employer has undertaken in writing to apply a label to the inner container of the controlled product, have applied to it a supplier label, as soon as possible after the controlled product is received from the supplier; and

(c) in any other case, have applied to it a supplier label.

(2) Subject to sections 10.37 to 10.39 and 10.42, where a controlled product, other than a controlled product referred to in paragraph 10.31(1)(c), is received from a supplier and an

employer places the controlled product in the work place in a container, other than the container in which it was received from the supplier, the employer shall apply to the container a supplier label or a work place label that discloses the information referred to in paragraphs 10.41(a) to (c).

(3) Subject to sections 10.41 and 10.42, no person shall remove, deface, modify or alter the supplier label applied to

(a) a controlled product that is in the work place; or

(b) the container of a controlled product that is in the work place. SOR/88-68, s. 12; SOR/94-263, s. 41; SOR/96-294, s. 2.

**10.36** (1) Subject to sections 10.37 to 10.39, where an employer produces a controlled product in a work place, other than a fugitive emission, or imports into Canada and brings into a work place, a controlled product, and the controlled product is not in a container, the employer shall disclose the following information on a work place label applied to the controlled product or on a sign posted in a conspicuous place in the work place:

(a) the product identifier;

(b) the hazard information in respect of the controlled product; and

(c) a statement indicating that a work place material safety data sheet for the controlled product is available in the work place.

(2) Subject to sections 10.37 and 10.39, where an employer produces a controlled product in the work place, other than a fugitive emission, or imports into Canada and brings into the work place a controlled product, and places the controlled product in a container, the employer shall apply to the container a work place label that discloses the information referred to in paragraphs (1)(a) to (c).

(3) Subsection (2) does not apply in respect of a controlled product that is

(a) intended for export, if the information referred to in paragraphs (1)(a) to (c) is disclosed on a sign posted in a conspicuous place in the work place; or

(b) packaged in a container and offered for sale in Canada, if the container is or is in the process of being appropriately labelled for that purpose. SOR/88-68, s. 12; SOR/96-294, s. 2.

**10.37** Where an employer stores a controlled product in the work place in a container that has applied to it a supplier label or a work place label, a portable container filled from that container is exempted from the labelling requirements under section 10.35 or 10.36 if

- (a) the controlled product is required for immediate use; or
- (b) the following conditions apply in respect of the controlled product:
  - (i) it is under the control of and used exclusively by the employee who filled the portable container,
  - (ii) it is used only during the work shift in which the portable container was filled, and
  - (iii) it is clearly identified by a work place label applied to the portable container that discloses the product identifier. SOR/88-68, s. 12; SOR/96-294, s. 2.

### *Special Cases*

**10.38** An employer shall, in a conspicuous place near a controlled product, post a sign in respect of the controlled product that discloses the product identifier if the controlled product is

- (a) in a process, reaction or storage vessel;
- (b) in a continuous-run container;
- (c) in a bulk shipment that is not placed in a container at the work place; or
- (d) not in a container and stored in bulk. SOR/88-68, s. 12; SOR/96-294, s. 2.

### *Laboratories*

**10.39** (1) Subject to subsection (2), the label of the container of a controlled product in a laboratory shall disclose

- (a) where the controlled product is used exclusively in the laboratory, the product identifier;
- (b) where the controlled product is a mixture or substance intended solely for analysis, testing or evaluation for research and development, the product identifier; and
- (c) where the controlled product originates from a laboratory supply house and is received

in a container in a quantity of less than 10 kg, the following information:

- (i) the product identifier,
- (ii) where a material safety data sheet is available, a statement to that effect,
- (iii) risk phrases that are appropriate to the controlled product,
- (iv) precautionary measures to be followed when handling, using or being exposed to the controlled product, and
- (v) where appropriate, first aid measures to be taken in case of exposure to the controlled product.

(2) No supplier label is required on a sample of a product received from a supplier that is, or the employer has reason to believe may be, a controlled product, if

(a) the controlled product is

- (i) in a container in a quantity of less than 10 kg,
- (ii) intended by the employer for use solely for analysis, testing or evaluation in a laboratory, and
- (iii) one in respect of which the supplier is exempted by section 9 of the *Controlled Products Regulations* from the requirement to provide a material safety data sheet; and

(b) the supplier provides a label that is to be affixed to the container of the controlled product disclosing the information described in subsection (3).

(3) A label referred to in paragraph (2)(b) shall disclose, in respect of the controlled product,

(a) the product identifier;

(b) the chemical identity or generic chemical identity of every ingredient of the controlled product referred to in any of subparagraphs 13(a)(i) to (iv) of the *Hazardous Products Act*, if known to the supplier;

(c) the supplier identity;

(d) the statement "Hazardous Laboratory Sample. For hazard information or in an emergency call (number disclosed pursuant to paragraph (e))/Échantillon pour laboratoire

d'un produit dangereux. Pour obtenir des renseignements sur les risques ou en cas d'urgence, composer (le numéro indiqué conformément à l'alinéa e)"; and

(e) an emergency telephone number of the supplier that enables

(i) a user of the controlled product to obtain the hazard information in respect of the controlled product, and

(ii) a medical professional to obtain the information in respect of the controlled product that is referred to in paragraph 13(a) of the *Hazardous Products Act*.

(4) Where a controlled product is in a container other than the container in which it was received from a supplier, or is produced in the work place, the employer is exempt from the requirements of section 10.36 and subparagraph 10.37(b)(iii) if

(a) the employer has complied with subsection (5);

(b) employee education is provided as required by these Regulations; and

(c) the controlled product

(i) originates from a laboratory supply house or is a laboratory sample,

(ii) is intended by the employer solely for analysis, testing or evaluation in a laboratory, and

(iii) is clearly identified through any mode of identification visible to employees at the work place.

(5) For the purposes of paragraph (4)(a), the employer shall ensure that the mode of identification used and the employee education enable the employees to readily identify and obtain either the information required on a material safety data sheet or the information referred to in subsection (3) with respect to the controlled product or laboratory sample. SOR/88-68, s. 12; SOR/96-294, s. 2; SOR/98-427, s. 8.

### *Signs*

**10.40** The information disclosed on a sign referred to in subsection 10.36(1), paragraph 10.36(3)(a), section 10.38 or paragraph 10.43(b) shall be of such a size that it is clearly legible to employees. SOR/88-68, s. 12; SOR/96-294, s. 2.



## *Replacing Labels*

**10.41** Where, in a work place, a label applied to a controlled product or a container of a controlled product becomes illegible or is removed from the controlled product or the container, the employer shall replace the label with a work place label that discloses the following information in respect of the controlled product:

(a) the product identifier;

(b) the hazard information; and

(c) a statement indicating that a material safety data sheet is available in the work place.  
SOR/88-68, s. 12; SOR/96-294, s. 2.

## *Exemptions from Disclosure*

**10.42** (1) Subject to subsection (2), where an employer has filed a claim for exemption from disclosure of information on a material safety data sheet or on a label pursuant to subsection 11(2) of the *Hazardous Materials Information Review Act*, the employer shall disclose, in place of the information that the employer is exempt from disclosing,

(a) where there is no final disposition of the proceedings in relation to the claim, the date on which the claim for exemption was registered and the registry number assigned to the claim under that Act; and

(b) where the final disposition of the proceedings in relation to the claim is that the claim is valid, a statement that an exemption has been granted and the date on which the exemption was granted.

(2) Where a claim for exemption is in respect of the chemical name, common name, generic name, trade name or brand name of a controlled product, the employer shall, on the material safety data sheet or label of the controlled product, replace that name with a code name or code number specified by the employer as the product identifier for that controlled product.  
SOR/88-68, s. 12; SOR/96-294, s. 2.

## *Hazardous Waste*

**10.43** Where a controlled product in a work place is hazardous waste, the employer shall disclose the generic name and hazard information in respect of the controlled product by

(a) applying a label to the hazardous waste or its container; or

(b) posting a sign in a conspicuous place near the hazardous waste or its container. SOR/88-68, s. 12; SOR/94-263, s. 42; SOR/96-294, s. 2.

### *Information Required in a Medical Emergency*

**10.44** For the purposes of subsection 125.2(1) of the Act, a medical professional is a registered nurse registered or licensed under the laws of a province. SOR/96-294, s. 2.

### *Fire and Explosion Prevention*

**10.45** (1) [Repealed, SOR/98-427, s. 9]

(2) For the purpose of interpreting the standards referred to in sections 10.46 to 10.49,

(a) [Repealed, SOR/2000-374, s. 4]

(b) "dangerous goods" means "controlled products" used in these Regulations; and

(c) in respect of a controlled product classified under the *Controlled Products Regulations*,

(i) "flammable liquids" means "flammable liquids" used in these Regulations,

(ii) "combustible liquids" means "combustible liquids" used in these Regulations,

(iii) "compressed gases" means "compressed gases" used in these Regulations,

(iv) "reactive substances" means "reactive flammable materials" used in these Regulations,

(v) "aerosol products" means "flammable aerosols" used in these Regulations,

(vi) "poisonous and infectious substances" means "poisonous and infectious materials" used in these Regulations,

(vii) "corrosive substances" means "corrosive materials" used in these Regulations, and

(viii) "oxidizing substances" means "oxidizing materials" used in these Regulations. SOR/96-294, s. 2; SOR/98-427, s. 9; SOR/2000-374, s. 4.

**10.46** Controlled products shall be stored in accordance with subsections 3.2.7, 3.2.8, 3.2.9 and 3.3.4 of the National Fire Code. SOR/96-294, s. 2; SOR/2000-374, s. 5.

**10.47** Flammable aerosols shall be stored in accordance with subsection 3.2.5 of the National Fire Code. SOR/96-294, s. 2; SOR/2000-374, s. 5.

**10.48** The provisions of Part 3 of the National Fire Code apply as follows:

(a) compressed gases shall be stored and handled in accordance with subsections 3.2.8 and 3.3.5;

(b) reactive flammable materials shall be stored and handled in accordance with subsections 3.2.7 and 3.3.4;

(c) poisonous and infectious materials shall be stored and handled in accordance with subsections 3.2.7, 3.2.8 and 3.3.4;

(d) corrosive materials shall be stored and handled in accordance with subsections 3.2.7, 3.2.8 and 3.3.4; and

(e) oxidizing materials shall be stored and handled in accordance with subsections 3.2.7, 3.2.8 and 3.3.4. SOR/96-294, s. 2; SOR/2000-374, s. 5.

**10.49** The provisions of Part 4 of the National Fire Code apply as follows:

(a) areas used for the storage, handling and use of flammable liquids and combustible liquids shall meet the standards set out in subsection 4.1.5, with the exception of article 4.1.5.6;

(b) the drainage and disposal of flammable liquids and combustible liquids shall be in accordance with subsection 4.1.6;

(c) flammable liquids and combustible liquids shall be stored in storage tanks meeting the standards set out in subsection 4.1.8;

(d) maintenance and operating procedures shall be established to prevent the escape of flammable liquids and combustible liquids, required by subsection 4.1.6;

(e) general container storage and handling of flammable liquids and combustible liquids shall be in accordance with subsections 4.2.1 to 4.2.8, with the exception of paragraph 4.2.8.4(d);

(f) rooms used for container storage of flammable liquids and combustible liquids shall

conform with subsection 4.2.9, with the exception of article 4.2.9.3;

(g) cabinets used for container storage of flammable liquids and combustible liquids shall conform with subsection 4.2.10;

(h) outdoor container storage of flammable liquids and combustible liquids shall be in accordance with subsection 4.2.11;

(i) storage tanks for flammable liquids and combustible liquids shall conform with section 4.3, with the exception of paragraph 4.3.13.1(1)(d), articles 4.3.13.5 and 4.3.15.2 and sentences 4.3.16.1(3) and (4);

(j) piping and transfer systems for flammable liquids and combustible liquids shall conform with section 4.4, with the exception of articles 4.4.6.2, 4.4.11.1 and 4.4.11.2; and

(k) flammable liquid and combustible liquid installations on piers and wharves shall conform with section 4.7, with the exception of article 4.7.10.2. SOR/96-294, s. 2; SOR/2000-374, s. 5.

## PART XI CONFINED SPACES

### *Interpretation*

#### **11.1** In this Part,

"class of confined spaces" means a group of at least two confined spaces that are likely, by reason of their similarity, to present the same hazards to persons entering, exiting or occupying them; (*catégorie d'espaces clos*)

"confined space" means an enclosed or partially enclosed space that

(a) is not designed or intended for human occupancy except for the purpose of performing work,

(b) has restricted means of access and egress, and

(c) may become hazardous to any person entering it owing to

(i) its design, construction, location or atmosphere,

(ii) the materials or substances in it, or

(iii) any other conditions relating to it; (*espace clos*)

"hot work" means any work where flame is used or a source of ignition may be produced. (*travail à chaud*) SOR/88-68, s. 14; SOR/88-632, s. 48(F); SOR/92-544, s. 1; SOR/95-286, s. 1(E).

### *Hazard Assessment*

**11.2** (1) Where it is likely that a person will, in order to perform work for an employer, enter a confined space and an assessment pursuant to this subsection has not been carried out in respect of the confined space, or in respect of the class of confined spaces to which it belongs, the employer shall appoint a qualified person

(a) to carry out an assessment of the physical and chemical hazards to which the person is likely to be exposed in the confined space or the class of confined spaces; and

(b) to specify the tests that are necessary to determine whether the person would be likely to be exposed to any of the hazards identified pursuant to paragraph (a).

(2) The qualified person referred to in subsection (1) shall, in a signed and dated report to the employer, record the findings of the assessment carried out pursuant to paragraph (1)(a).

(3) The employer shall make a copy of any report made pursuant to subsection (2) available to the safety and health committee or the safety and health representative, if either exists.

(4) Subject to subsection (5), the report made pursuant to subsection (2) shall be reviewed by a qualified person at least once every three years to ensure that its assessment of the hazards with which it is concerned is still accurate.

(5) If a confined space has not been entered in the three years preceding the time when the report referred to in subsection (4) should have been reviewed and no entry is scheduled, the report need not be reviewed until it becomes likely that a person will, in order to perform work for an employer, enter the confined space. SOR/88-68, s. 14; SOR/88-632, s. 49(F); SOR/92-544, s. 1; SOR/95-286, s. 2(F).

### *Entry Procedures*

**11.3** Every employer shall, after considering the report made pursuant to subsection 11.2(2),

(a) in consultation with the safety and health committee or the safety and health representative, if either exists, establish procedures, with the date on which they are established specified therein, that are to be followed by a person entering, exiting or occupying a confined space assessed pursuant to subsection 11.2(1), or a confined space that belongs to a class of confined spaces assessed pursuant to that subsection, and establish, where reasonably practicable, an entry permit system that provides for

(i) specifying, in each case, the length of time for which an entry permit is valid, and

(ii) recording

(A) the name of the person entering the confined space, and

(B) the date and time of entry and the anticipated time of exit;

(b) specify the protection equipment referred to in Part XII that is to be used by every person who is granted access to the confined space by the employer;

(c) specify any insulated protection equipment and tools referred to in Part VIII that a person may need in the confined space; and

(d) specify the protection equipment and emergency equipment to be used by a person who takes part in the rescue of a person from the confined space or in responding to other emergency situations in the confined space. SOR/92-544, s. 1; SOR/95-286, s. 3.

### *Confined Space Entry*

**11.4 (1)** The employer shall, where a person is about to enter a confined space, appoint a qualified person

(a) to verify, by means of tests, that compliance with the following specifications can be achieved during the period of time that the person will be in the confined space, namely,

(i) the concentration of any chemical agent or combination of chemical agents in the confined space to which the person is likely to be exposed will not result in the exposure of the person

(A) to a concentration of that chemical agent or combination of chemical agents in excess of the value referred to in paragraph 10.19(1)(a), or

(B) to a concentration of that chemical agent or combination of chemical agents in

excess of the percentage set out in subsection 10.20(1), or in subsection 10.20(2) under the circumstances described in that subsection,

(ii) the concentration of airborne hazardous substances, other than chemical agents, in the confined space is not hazardous to the safety or health of the person, and

(iii) the percentage of oxygen in the air in the confined space is not less than 18 per cent by volume and not more than 23 per cent by volume, at normal atmospheric pressure;

(b) to verify that

(i) any liquid in which the person could drown has been removed from the confined space,

(ii) any free-flowing solid in which the person may become entrapped has been removed from the confined space,

(iii) the entry of any liquid, free-flowing solid or hazardous substance into the confined space has been prevented by a secure means of disconnection or by the fitting of blank flanges,

(iv) all electrical and mechanical equipment that may present a hazard to the person has been disconnected from its power source, real or residual, and has been locked out, and

(v) the opening for entry into and exit from the confined space is sufficient to allow the safe passage of a person using protection equipment; and

(c) subject to subsection 11.5(1), to verify that the specifications set out in paragraph (a) are complied with during all times that a person is in the confined space.

(2) The qualified person referred to in subsection (1) shall, in a signed and dated report to the employer, set out the results of the verification carried out in accordance with that subsection, including the test methods, the test results and a list of the test equipment used.

(3) The employer shall

(a) where the report made pursuant to subsection (2) indicates that a person who has entered the confined space has been in danger, send the report to the safety and health committee or the safety and health representative, if either exists; and

(b) in all other cases, make a written copy or a machine-readable version of the report

available to the safety and health committee or the safety and health representative, if either exists. SOR/88-68, s. 14; SOR/92-544, s. 1; SOR/95-286, s. 4; SOR/96-294, s. 3.

## *Emergency Procedures and Equipment*

[SOR/95-286, s. 5(F)]

**11.5 (1)** Where conditions in a confined space or the nature of the work to be performed in a confined space is such that the specifications set out in paragraph 11.4(1)(a) cannot be complied with during all times that a person is in the confined space, the employer shall

(a) in consultation with the safety and health committee or the safety and health representative, if either exists, establish emergency procedures to be followed in the event of an accident or other emergency in or near the confined space, which procedures shall specify the date on which they are established and provide for the immediate evacuation of the confined space when

(i) an alarm is activated, or

(ii) there is any significant change in a concentration or percentage referred to in paragraph 11.4(1)(a) that would adversely affect the safety or health of a person in the confined space;

(b) provide the protection equipment referred to in paragraphs 11.3(b), (c) and (d) for each person who is about to enter the confined space;

(c) ensure that a qualified person trained in the entry and emergency procedures established pursuant to paragraph 11.3(a) and paragraph (a) is

(i) in attendance outside the confined space, and

(ii) in communication with the person inside the confined space;

(d) provide the qualified person referred to in paragraph (c) with a suitable alarm device for summoning assistance; and

(e) ensure that two or more persons are in the immediate vicinity of the confined space to assist in the event of an accident or other emergency.

(2) One of the persons referred to in paragraph (1)(e) shall



- (a) be trained in the emergency procedures established pursuant to paragraph (1)(a);
- (b) be the holder of a basic first aid certificate; and
- (c) be provided with the protection equipment and emergency equipment referred to in paragraph 11.3(d).

(3) The employer shall ensure that every person entering, exiting or occupying a confined space referred to in subsection (1) wears an appropriate safety harness that is securely attached to a lifeline that

- (a) is attached to a secure anchor outside the confined space;
- (b) is controlled by the qualified person referred to in paragraph (1)(c);
- (c) protects the person from the hazard for which it is provided and does not in itself create a hazard; and
- (d) is, where reasonably practicable, equipped with a mechanical lifting device. SOR/92-544, s. 1; SOR/95-286, s. 6.

### *Record of Emergency Procedures and Equipment*

**11.6** (1) When a person is about to enter a confined space under circumstances such that the specifications set out in paragraph 11.4(1)(a) cannot be complied with, the qualified person referred to in paragraph 11.5(1)(c) shall, in a signed and dated report to the employer,

- (a) specify those procedures established pursuant to paragraph 11.5(1)(a) that are to be followed and the protection equipment, insulated protection equipment and tools and the emergency equipment that are to be used; and
- (b) specify any additional procedures and any other equipment that may be needed to ensure the safety and health of the person.

(2) The report made pursuant to subsection (1) and any procedures specified therein shall be explained by the qualified person to every employee who is about to enter a confined space, and a copy of the report shall be signed and dated by any employee to whom the report and the procedures have been so explained, acknowledging by signature the reading of the report and the explanation thereof. SOR/92-544, s. 1; SOR/95-286, s. 7.

### *Provision and Use of Equipment*

**11.7** (1) The employer shall provide

(a) each person who is granted access to a confined space with the protection equipment specified pursuant to paragraph 11.3(b); and

(b) each person who is to undertake rescue operations with the protection equipment and emergency equipment specified pursuant to paragraph 11.3(d).

(2) The employer shall ensure that every person who enters, exits or occupies a confined space follows the procedures established pursuant to paragraph 11.3(a) and uses the protection equipment specified pursuant to paragraphs 11.3(b) and (c). SOR/92-544, s. 1; SOR/95-286, s. 8.

### *Precaution*

**11.8** No person shall close off a confined space until a qualified person has verified that no person is inside it. SOR/92-544, s. 1.

### *Hot Work*

**11.9** (1) Unless a qualified person has determined that the work can be performed safely, hot work shall not be performed in a confined space that contains

(a) an explosive or flammable hazardous substance in a concentration in excess of 10 per cent of its lower explosive limit; or

(b) oxygen in a concentration in excess of 23 per cent.

(2) Where hot work is to be performed in a confined space that contains concentrations of flammable or explosive materials in excess of the concentration set out in paragraph (1)(a) or (b),

(a) a qualified person shall patrol the area surrounding the confined space and maintain a fire-protection watch in that area until all fire hazard has passed; and

(b) fire extinguishers specified as emergency equipment pursuant to paragraph 11.3(d) shall be provided in the area referred to in paragraph (a).

(3) Where an airborne hazardous substance may be produced by hot work in a confined space, no person shall enter or occupy the confined space unless

(a) section 11.10 is complied with; or

(b) the person uses a respiratory protective device that meets the requirements of sections 12.2, 12.3 and 12.7. SOR/92-544, s. 1; SOR/95-286, s. 9.

### *Ventilation Equipment*

**11.10** (1) Where ventilation equipment is used to maintain the concentration of a chemical agent or combination of chemical agents in a confined space at or below the concentration referred to in subparagraph 11.4(1)(a)(i), or to maintain the percentage of oxygen in the air of a confined space within the limits referred to in subparagraph 11.4(1)(a)(iii), the employer shall not grant access to the confined space to any person unless

(a) the ventilation equipment is

(i) equipped with an alarm that will, if the equipment fails, be activated automatically and be audible or visible to every person in the confined space, or

(ii) monitored by an employee who is in constant attendance at the equipment and who is in communication with the person or persons in the confined space; and

(b) in the event of failure of the ventilation equipment, sufficient time will be available for the person to escape from the confined space before

(i) the concentration of the chemical agent or combination of chemical agents in the confined space exceeds the concentrations referred to in subparagraph 11.4(1)(a)(i), or

(ii) the percentage of oxygen in the air ceases to remain within the limits referred to in subparagraph 11.4(1)(a)(iii).

(2) If the ventilation equipment fails to operate properly, the employee referred to in subparagraph (1)(a)(ii) shall immediately inform the person or persons in the confined space of the failure of the equipment. SOR/92-544, s. 1.

### *Training*

**11.11** (1) The employer shall provide every employee who is likely to enter a confined space with instruction and training in

(a) the procedures established pursuant to paragraphs 11.3(a) and 11.5(1)(a); and

(b) the use of the protection equipment referred to in paragraphs 11.3(b), (c) and (d).

(2) The employer shall ensure that no person enters a confined space unless the person is instructed in

(a) the procedures to be followed in accordance with paragraphs 11.3(a) and 11.5(1)(a); and

(b) the use of the protection equipment referred to in paragraphs 11.3(b), (c) and (d).  
SOR/92-544, s. 1; SOR/95-286, s. 10(F).

### *Record Keeping*

**11.12** The employer shall, at the employer's place of business nearest to the work place in which the confined space is located, keep a written copy or a machine-readable version of

(a) any report made pursuant to subsection 11.2(2) and the procedures established pursuant to paragraphs 11.3(a) and 11.5(1)(a) for a period of ten years after the date on which the qualified person signed the report or the procedures were established; and

(b) any report made pursuant to subsection 11.4(2)

(i) for a period of ten years after the date on which the qualified person signed the report where the verification procedures undertaken pursuant to paragraphs 11.4(1)(a) and (c) indicate that the specifications set out in subparagraphs 11.4(1)(a)(i) to (iii) were not complied with, and

(ii) in every other case, for a period of two years after the date on which the qualified person signed the report. SOR/92-544, s. 1.

## PART XII SAFETY MATERIALS, EQUIPMENT, DEVICES AND CLOTHING

### *General*

**12.1** Where

(a) it is not reasonably practicable to eliminate or control a safety or health hazard in a work place within safe limits, and

(b) the use of protection equipment may prevent or reduce injury from that hazard,

every person granted access to the work place who is exposed to that hazard shall use the protection equipment prescribed by this Part. SOR/94-263, s. 44(F); SOR/95-533, s. 2(F).

**12.2** All protection equipment referred to in section 12.1

(a) shall be designed to protect the person from the hazard for which it is provided; and

(b) shall not in itself create a hazard.

**12.3** All protection equipment provided by the employer shall

(a) be maintained, inspected and tested by a qualified person; and

(b) where necessary to prevent a health hazard, be maintained in a clean and sanitary condition by a qualified person.

### *Protective Headwear*

**12.4** Where there is a hazard of head injury in a work place, protective headwear that meets the standards set out in CSA Standard Z94.1-M1977, Industrial Protective Headwear, the English version of which is dated April, 1977, as amended to September, 1982 and the French version of which is dated April, 1980 as amended to September, 1982, shall be used.

### *Protective Footwear*

**12.5** (1) Where there is a hazard of a foot injury or electric shock through footwear in a work place, protective footwear that meets the standards set out in CSA Standard Z195-M1984, Protective Footwear, the English version of which is dated March, 1984 and the French version of which is dated December, 1984, shall be used.

(2) Where there is a hazard of slipping in a work place, non-slip footwear shall be used.

### *Eye and Face Protection*

**12.6** Where there is a hazard of injury to the eyes, face, ears or front of the neck of an

employee in a work place, the employer shall provide eye or face protectors that meet the standards set out in CSA Standard Z94.3-M1982, Industrial Eye and Face Protectors, the English version of which is dated May, 1982 and the French version of which is dated February, 1983.

### *Respiratory Protection*

**12.7** (1) Where there is a hazard of an airborne hazardous substance or an oxygen deficient atmosphere in a work place, the employer shall provide a respiratory protective device that is listed in the *NIOSH Certified Equipment List* published on February 13, 1998 by the National Institute for Occupational Safety and Health, as amended from time to time, and that protects against the hazardous substance or oxygen deficiency, as the case may be.

(2) A respiratory protective device referred to in subsection (1) shall be selected, fitted, cared for, used and maintained in accordance with the standards set out in CSA Standard Z94.4-M1982, Selection, Care and Use of Respirators, the English version of which is dated May, 1982, as amended to September, 1984 and the French version of which is dated March, 1983, as amended to September, 1984, excluding clauses 6.1.5, 10.3.3.1.2 and 10.3.3.4.2(c).

(3) Where air is provided for the purpose of a respiratory protective device referred to in subsection (1),

(a) the air shall meet the standards set out in clauses 5.5.2 to 5.5.11 of CSA Standard CAN3-Z180.1-M85, *Compressed Breathing Air and Systems*, the English version of which is dated December 1985 and the French version of which is dated November 1987; and

(b) the system that supplies air shall be constructed, tested, operated and maintained in accordance with the CSA Standard referred to in paragraph (a). SOR/88-68, s. 14; SOR/94-263, s. 45; SOR/99-151, s. 1.

**12.8** Where a steel or aluminum self-contained breathing apparatus cylinder has a dent deeper than 1.5 mm and less than 50 mm in major diameter or shows evidence of deep isolated pitting, cracks or splits, the cylinder shall be removed from service until it has been shown to be safe for use by means of a hydrostatic test at a pressure equal to one and one-half times the maximum allowable working pressure. SOR/94-263, s. 46.

### *Skin Protection*

**12.9** Where there is a hazard of injury or disease to or through the skin in a work place, the employer shall provide to every person granted access to the work place

- (a) a shield or screen;
- (b) a cream to protect the skin; or
- (c) an appropriate body covering.

### *Fall-Protection Systems*

**12.10** (1) Where a person, other than an employee who is installing or removing a fall-protection system in accordance with the instructions referred to in subsection (5), works from

- (a) an unguarded structure that is
  - (i) more than 2.4 m above the nearest permanent safe level, or
  - (ii) above any moving parts of machinery or any other surface or thing that could cause injury to an employee upon contact,
- (b) a temporary structure that is more than 6 m above a permanent safe level, or
- (c) a ladder at a height of more than 2.4 m above the nearest permanent safe level where, because of the nature of the work, that person cannot use one hand to hold onto the ladder,

the employer shall provide a fall-protection system.

(2) The components of a fall-protection system shall meet the following standards:

- (a) CSA Standard Z259.1-1976, Fall-Arresting Safety Belts and Lanyards for the Construction and Mining Industries, the English version of which is dated November, 1976, as amended to May, 1979 and the French version of which is dated April, 1980;
- (b) CSA Standard Z259.2-M1979, Fall-Arresting Devices, Personnel Lowering Devices and Life Lines, the English version of which is dated November, 1979 and the French version of which is dated October, 1983; and
- (c) CSA Standard Z259.3-M1978, Lineman's Body Belt and Lineman's Safety Strap, the English version of which is dated September, 1978, as amended to April, 1981 and the French version of which is dated April, 1980, as amended to April, 1981.

(3) The anchor of a fall-protection system shall be capable of withstanding a force of 17.8 kN.

- (4) A fall-protection system that is used to arrest the fall of a person shall prevent that person
- (a) from being subjected to a peak fall arrest force greater than 8 kN; and
  - (b) from falling freely for more than 1.2 m.
- (5) Where an employee is about to install or remove a fall-protection system, the employer shall
- (a) prepare written instructions for the safe installation or removal of the fall-protection system; and
  - (b) keep a copy of the instructions readily available for the information of the employee. SOR/88-632, s. 50(F); SOR/94-263, s. 47(F).

### *Protection Against Drowning*

**12.11** (1) Where, in a work place, there is a hazard of drowning, the employer shall provide every person granted access to the work place with

(a) a life jacket or buoyancy device that meets the standards set out in the Canadian General Standards Board Standard

- (i) CAN2-65.7-M80, Life Jackets, Inherently Buoyant Type, dated April, 1980, or
- (ii) 65-GP-11, Standard for: Personal Flotation Devices, dated October, 1972; or

(b) a safety net or a fall-protection system.

(2) Where, in a work place, there is a hazard of drowning,

(a) emergency equipment shall be provided and held in readiness;

(b) a person who is qualified to operate all the emergency equipment provided shall be available;

(c) if appropriate, a powered boat shall be provided and held in readiness; and

(d) written emergency procedures shall be prepared by the employer containing

- (i) a full description of the procedures to be followed and the responsibilities of all persons granted access to the work place, and



(ii) the location of any emergency equipment.

(3) Where a work place is a wharf, dock, pier, quay or other similar structure, a ladder that extends at least two rungs below water level shall be affixed to the face of the structure every 60 m along its length. SOR/88-632, s. 51(F).

### *Loose Clothing*

**12.12** Loose clothing, long hair, dangling accessories, jewellery or other similar items that are likely to be hazardous to the safety or health of an employee in a work place shall not be worn unless they are so tied, covered or otherwise secured as to prevent the hazard.

### *Protection Against Moving Vehicles*

**12.13** Where an employee is regularly exposed to contact with moving vehicles during his work, he shall

(a) wear a high-visibility vest or other similar clothing, or

(b) be protected by a barricade

that is readily visible under all conditions of use. SOR/88-632, s. 52(F).

### *Records*

**12.14** (1) A record of all protection equipment provided by the employer shall be kept by him in the work place in which the equipment is located for a period of two years after it ceases to be used.

(2) The record referred to in subsection (1) shall contain

(a) a description of the equipment and the date of its acquisition by the employer;

(b) the date and result of each inspection and test of the equipment;

(c) the date and nature of any maintenance work performed on the equipment since its acquisition by the employer; and

(d) the name of the person who performed the inspection, test or maintenance of the

equipment. SOR/88-632, s. 53(F).

### *Instructions and Training*

**12.15** (1) Every person granted access to the work place who uses protection equipment shall be instructed by the employer in the use of the equipment.

(2) Every employee who uses protection equipment shall be instructed and trained in the use, operation and maintenance of the equipment.

(3) Every person granted access to a work place shall be instructed in respect of the written emergency procedures referred to in paragraph 12.11(2)(d).

(4) The instructions referred to in subsections (2) and (3) shall be

(a) set out in writing; and

(b) kept by the employer readily available for examination by every person granted access to the work place.

### *Defective Protection Equipment*

**12.16** Where an employee finds any defect in protection equipment that may render it unsafe for use, he shall report the defect to his employer as soon as possible.

**12.17** An employer shall mark or tag as unsafe and remove from service any protection equipment used by his employees that has a defect that may render it unsafe for use.

## PART XIII TOOLS AND MACHINERY

### *Interpretation*

**13.1** In this Part, "explosive actuated fastening tool" means a tool that, by means of an explosive force, propels or discharges a fastener for the purpose of impinging it on, affixing it to or causing it to penetrate another object or material. (*pistolet de scellement à cartouches explosives*)

## *Design, Construction, Operation and Use of Tools*

**13.2** The exterior surface of any tool used by an employee in a fire hazard area shall be made of non-sparking material. SOR/88-632, s. 54.

**13.3** All portable electric tools used by employees shall meet the standards set out in CSA Standard CAN C22.2 No. 71.1-M89, *Portable Electric Tools*, the English version of which is dated September 1989 and the French version of which is dated February 1991. SOR/94-263, s. 48.

**13.4** (1) Subject to subsection (2), all portable electric tools used by employees shall be grounded.

(2) Subsection (1) does not apply to tools that

(a) are powered by a self-contained battery;

(b) have a protective system of double insulation; or

(c) are used in a location where reliable grounding cannot be obtained if the tools are supplied from a double insulated portable ground fault circuit interrupter of the class A type that meets the standards set out in CSA Standard C22.2 No. 144-1977, *Ground Fault Circuit Interrupters*, dated March, 1977. SOR/94-263, s. 49(F).

**13.5** All portable electric tools used by employees in a fire hazard area shall be marked as appropriate for use or designed for use in the area of that hazard.

**13.6** Where an air hose is connected to a portable air-powered tool used by an employee, a restraining device shall be attached

(a) where an employee may be injured by the tool falling, to the tool; and

(b) to all hose connections, in order to prevent injury to an employee in the event of an accidental disconnection of a hose.

**13.7** (1) All explosive actuated fastening tools used by employees shall meet the standards set out in CSA Standard Z166-1975, *Explosive Actuated Fastening Tools*, dated June, 1975.

(2) No employee shall operate an explosive actuated fastening tool unless authorized to do so by his employer.

(3) Every employee who operates an explosive actuated fastening tool shall operate it in

accordance with the CSA Standard referred to in subsection (1).

**13.8** All chain saws used by employees shall meet the standards set out in CSA Standard CAN3-Z62.1-M85, Chain Saws, dated February, 1985.

### *Defective Tools and Machines*

**13.9** Where an employee finds any defect in a tool or machine that may render it unsafe for use, he shall report the defect to his employer as soon as possible.

**13.10** An employer shall mark or tag as unsafe and remove from service any tool or machine used by his employees that has a defect that may render it unsafe for use.

### *Instructions and Training*

**13.11** Every employee shall be instructed and trained by a qualified person appointed by his employer in the safe and proper inspection, maintenance and use of all tools and machinery that he is required to use.

**13.12** (1) Every employer shall maintain a manual of operating instructions for each type of portable electric tool, portable air-powered tool, explosive actuated fastening tool and machine used by his employees.

(2) A manual referred to in subsection (1) shall be kept by the employer readily available for examination by an employee who is required to use the tool or machine to which the manual applies. SOR/88-632, s. 55(F).

### *General Requirements for Machine Guards*

**13.13** (1) Every machine that has exposed moving, rotating, electrically charged or hot parts or that processes, transports or handles material that constitutes a hazard to an employee shall be equipped with a machine guard that

(a) prevents the employee or any part of his body from coming into contact with the parts or material;

(b) prevents access by the employee to the area of exposure to the hazard during the operation of the machine; or

(c) makes the machine inoperative if the employee or any part of his clothing is in or near a

part of the machine that is likely to cause injury.

(2) To the extent that is reasonably practicable, a machine guard referred to in subsection (1) shall not be removable.

(3) A machine guard shall be so constructed, installed and maintained that it meets the requirements of subsection (1). SOR/94-263, s. 50(F).

### *Use, Operation, Repair and Maintenance of Machine Guards*

**13.14** Machine guards shall be operated, maintained and repaired by a qualified person.

**13.15** Subject to section 13.16, where a machine guard is installed on a machine, no person shall use or operate the machine unless the machine guard is in its proper position. SOR/94-263, s. 51.

**13.16** (1) Subject to subsection (2), where it is necessary to remove a machine guard from a machine in order to perform repair or maintenance work on the machine, no person shall perform the repair or maintenance work unless the machine has been locked out in accordance with a written lock out procedure provided by the employer.

(2) Where it is not reasonably practicable to lock out a machine referred to in subsection (1) in order to perform repair or maintenance work on the machine, the work may be performed if

(a) the person performing the work follows written instructions provided by the employer that will ensure that any hazard to that person is not significantly greater than it would be if the machine had been locked out; and

(b) the person performing the work

(i) obtains a written authorization from the employer each time the work is performed, and

(ii) performs the work under the direct supervision of a qualified person.

**13.17** A copy of the instructions referred to in section 13.16 shall be kept readily available by the employer for the information of persons who perform repair and maintenance work on his machines.

### *Abrasive Wheels*

**13.18** Abrasive wheels shall be

- (a) used only on machines equipped with machine guards,
- (b) mounted between flanges, and
- (c) operated

in accordance with sections 4 to 6 of CSA Standard B173.5-1979, Safety Requirements for the Use, Care and Protection of Abrasive Wheels, dated February, 1979. SOR/88-632, s. 56(F).

**13.19** A bench grinder shall be equipped with a work rest or other device that

- (a) prevents the work piece from jamming between the abrasive wheel and the wheel guard; and
- (b) does not make contact with the abrasive wheel at any time.

### *Mechanical Power Transmission Apparatus*

**13.20** Equipment used in the mechanical transmission of power shall be guarded in accordance with sections 7 to 10 of ANSI Standard ANSI B15.1-1972, Safety Standard for Mechanical Power Transmission Apparatus, dated July, 1972.

### *Woodworking Machinery*

**13.21** Woodworking machinery shall be guarded in accordance with clause 3.3 of CSA Standard Z114-M1977, Safety Code for the Woodworking Industry, dated March, 1977.

### *Punch Presses*

**13.22** Punch presses shall meet the standards set out in CSA Standard Z142-1976, Code for the Guarding of Punch Presses at Point of Operation, dated February, 1976.

## PART XIV MATERIALS HANDLING

## *Interpretation*

### **14.1** In this Part,

"materials handling equipment" means equipment, including its supporting structures, auxiliary equipment and rigging devices, used to transport, lift, move or position persons, materials, goods or things and includes mobile equipment used to lift, hoist or position persons, but does not include an elevating device that is permanently installed in a building; (*appareil de manutention*)

"motorized hand-rider truck" means motorized materials handling equipment that is designed to be controlled by a walking or onboard operator; (*chariot à conducteur porté ou accompagnant*)

"operator" means a person who controls the operation of motorized or manual materials handling equipment and who has received or is receiving instruction and training in respect of the procedures referred to in subsection 14.23(1) or (3), as the case may be; (*opérateur*)

"safe working load" means the maximum load that the motorized or manual materials handling equipment is designed and constructed to handle or support safely under particular operating conditions; (*charge de travail admissible*)

"signaller" means a person instructed by an employer to direct, by means of visual or auditory signals, the safe movement and operation of motorized materials handling equipment. (*signaleur*) SOR/96-400, s. 1.

## *Application*

### **14.2** This Part does not apply in respect of

- (a) subject to subsection 14.4(4), the use and operation of motor vehicles on public roads;
- (b) the use and operation of tackle regulated pursuant to the *Canada Shipping Act* in the loading or unloading of ships; or
- (c) the underground workings of mines. SOR/96-400, s. 1.

## *General*

**14.3** (1) Motorized and manual materials handling equipment shall, to the extent that is reasonably practicable, be so designed and constructed that if there is a failure of any part of the materials handling equipment, that failure will not result in loss of control of the materials handling equipment or create a hazardous condition.

(2) All glass and other transparent materials used in doors, windows and other parts of motorized materials handling equipment shall be of a type that does not shatter into sharp or dangerous pieces on impact.

(3) Subject to subsection 14.51(1), an employer shall ensure that the onboard operator's compartment in, or position on, motorized materials handling equipment provides adequate adjustability of range to accommodate properly the operator for the work that is required to be done. SOR/96-400, s. 1.

## *Protection from Falling Objects*

**14.4** (1) Where motorized materials handling equipment is used under such circumstances that the onboard operator of the equipment may be struck by a falling object or shifting load, the employer shall equip the motorized materials handling equipment with a protective structure of such a design, construction and strength that it will, under all foreseeable conditions, prevent the penetration of the object or load into the compartment or position occupied by the operator.

(2) Subsection (1) does not apply to a motorized hand-rider truck unless there is a likelihood of its operator being struck by a falling object or a shifting load.

(3) A protective structure referred to in subsection (1) shall be

(a) constructed of non-combustible or fire-resistant material; and

(b) designed to permit quick exit from the motorized materials handling equipment in an emergency.

(4) Where there is a likelihood that materials, goods or things will shift and endanger employees in a motor vehicle acquired after July 1, 1995 and having a gross vehicle weight of less than 4,500 kg, the employer shall install a bulkhead or other means to protect the employees. SOR/96-400, s. 1.

**14.5** Where during the loading or unloading of motorized materials handling equipment the load will pass over the operator's compartment or position, the operator shall not occupy that



compartment in, or position on, the equipment unless it is equipped with a protective structure required under section 14.4. SOR/96-400, s. 1.

### *Protection from Overturning*

**14.6** (1) Subject to subsection 14.51(2), where motorized materials handling equipment is used in circumstances where it may turn over, it shall be fitted with a rollover protection device that meets the standards set out in CSA Standard B352-M1980, *Rollover Protective Structures (ROPS) for Agricultural, Construction, Earthmoving, Forestry, Industrial, and Mining Machines*, the English version of which is dated September 1980 and the French version of which is dated April 1991, as amended from time to time, and that will prevent the operator of the motorized materials handling equipment from being trapped or crushed under the equipment if it does turn over.

(2) Subject to subsection 14.51(1), all motorized materials handling equipment used in circumstances described in subsection (1) shall be fitted with

(a) seat-belts; and

(b) restraining devices preventing the displacement of the battery if the equipment turns over. SOR/88-632, s. 57(F); SOR/94-263, s. 52; SOR/96-400, s. 1.

### *Seat-Belts*

**14.7** Where motorized materials handling equipment is used under conditions where a seat-belt or shoulder-type strap restraining device is likely to contribute to the safety of the operator or passengers, the materials handling equipment shall be equipped with such a belt or device. SOR/88-68, s. 14; SOR/94-263, s. 53(F); SOR/96-400, s. 1.

### *Fuel Tanks*

**14.8** (1) Where a fuel tank, compressed gas cylinder or other container or any associated assembly mounted on motorized materials handling equipment contains a hazardous substance, the employer shall ensure that the tank, cylinder, container or assembly is

(a) so located or guarded that under all conditions it is not hazardous to the safety or health of an employee who is required to operate or ride on the materials handling equipment;

(b) connected to fuel overflow and vent pipes that are so located that fuel spills and

vapours cannot be

(i) ignited by hot exhaust pipes or other hot or sparking parts, or

(ii) hazardous to the safety or health of an employee who is required to operate or ride on the materials handling equipment; and

(c) labelled on its servicing caps or covers as to its contents.

(2) Subject to subsection 14.51(2), the installation, operation and maintenance of propane fuelled motorized materials handling equipment shall be in accordance with the Canadian Gas Association Standard CAN/CGA-B149.2-M91, *Propane Installation Code*, dated 1991, as amended from time to time. SOR/96-400, s. 1.

### *Protection from Elements*

**14.9** (1) Motorized materials handling equipment that is regularly used outdoors shall be fitted with a roof or other structure that will protect the operator from exposure to any weather condition that is likely to be hazardous to the operator's safety or health.

(2) Where the heat produced by motorized materials handling equipment results in a temperature above 26°C in the compartment or position occupied by that operator, the area shall be protected from the heat by an insulated barrier. SOR/96-400, s. 1.

### *Vibration*

**14.10** Subject to subsection 14.51(1), an employer shall ensure that all motorized materials handling equipment in use is designed and constructed so that any employee required to operate or ride on it will not be injured or its control will not be impaired by any vibration, jolting or uneven movement of the materials handling equipment. SOR/88-632, s. 58; SOR/96-400, s. 1.

### *Controls*

**14.11** Subject to subsection 14.51(1), the design and arrangement of displays and controls and the general design and layout of the operator's compartment or position on all motorized materials handling equipment shall not hinder or prevent its operator from operating the equipment and shall, where reasonably practicable, maximize its operator's ability to collect, comprehend and process information necessary for the safe use of the equipment. SOR/96-400, s. 1.

## *Fire Extinguishers*

**14.12** (1) An employer shall equip motorized materials handling equipment that is used for transporting or handling flammable substances with a dry chemical fire extinguisher.

(2) A fire extinguisher referred to in subsection (1) shall

(a) have not less than a 5 B, C rating as defined in the National Fire Code;

(b) meet the standards set out in section 6.2 of the National Fire Code; and

(c) be so located that it is readily accessible to the operator of the motorized materials handling equipment while the operator is in the operating position.

(3) Subsection (1) does not apply to motorized materials handling equipment that is used exclusively within a building that has the fire extinguishers required by Part XVII. SOR/96-400, s. 1.

## *Means of Entering and Exiting*

**14.13** (1) Subject to subsection 14.51(1), an employer shall ensure that all motorized materials handling equipment has a safe means of entering and exiting

(a) the work area of the operator; and

(b) any other place on the equipment to which an employee requires regular access.

(2) A safe means referred to in subsection (1) shall take into account the employee's body dimensions while wearing personal protective equipment and shall not require the employee to jump from the motorized materials handling equipment. SOR/96-400, s. 1.

## *Lighting*

**14.14** (1) Subject to subsection (2), where motorized materials handling equipment is used by an employee in a work place at night or at any time when the level of lighting within the work place is less than 10 lx, the materials handling equipment shall be fitted with

(a) warning lights on the front and rear that are visible from a distance of not less than 100 m; and

(b) lighting that ensures the safe operation of the equipment.

(2) No motorized materials handling equipment shall be used at night on a route that is used by other vehicles unless it is fitted with such lights as are required under the laws of the province in which the equipment is used. SOR/96-400, s. 1.

### *Control Systems*

**14.15** All motorized materials handling equipment shall be fitted with braking, steering and other control systems that

(a) are capable of controlling and stopping its movement and that of any hoist, bucket or other part of the equipment; and

(b) respond reliably and quickly to moderate effort on the part of the employee controlling them. SOR/96-400, s. 1.

### *Warning Devices*

**14.16** (1) Motorized materials handling equipment that is used in an area occupied by employees and that travels

(a) forward at speeds in excess of 8 km/h shall be fitted with a horn or other similar audible warning device; and

(b) in reverse shall, subject to subsection 14.51(1), be fitted with a horn or other similar audible warning device that automatically operates while it travels in reverse.

(2) Where an audible warning device referred to in subsection (1) cannot be clearly heard above the noise of the motorized materials handling equipment and any surrounding noise, does not allow enough time for a person to avoid the danger in question or does not otherwise provide adequate warning, other visual, audible or tactile warning devices or methods shall be used so that adequate warning is provided.

(3) Where the use of an audible warning device referred to in subsection (1) would result in night-time noise levels in excess of those allowed by a municipal by-law applicable where the motorized material handling equipment is used, visual or tactile warning devices or methods may be used at night if such devices or methods provide an adequate warning. SOR/96-400, s. 1.

## *Rear View Mirrors*

**14.17** Where motorized materials handling equipment cannot be operated safely in reverse unless it is fitted with sufficient rear-view mirrors, it shall be so fitted. SOR/88-632, s. 59(F); SOR/96-400, s. 1.

## *Guided Industrial Vehicles*

**14.18** Subject to subsection 14.51(2), the design, construction, operation and maintenance of guided industrial vehicles shall meet the standards set out in the American Society of Mechanical Engineers Standard ASME B56.5-1993, *Safety Standard for Guided Industrial Vehicles and Automated Functions of Manned Industrial Vehicles*, dated 1993, as amended from time to time. SOR/96-400, s. 1.

## *Conveyors*

**14.19** Subject to subsection 14.51(2), the design, construction, operation and maintenance of each conveyor, cableway or other similar motorized materials handling equipment shall meet the standards set out in the American Society of Mechanical Engineers Standard ASME B20.1-1993, *Safety Standard for Conveyors and Related Equipment*, dated 1993, as amended from time to time. SOR/96-400, s. 1.

## DIVISION II MAINTENANCE, USE AND OPERATION

### *Inspection, Testing and Maintenance*

**14.20** (1) Before motorized or manual materials handling equipment is used for the first time in a work place, the employer shall set out in writing instructions on the inspection, testing and maintenance of that materials handling equipment.

(2) Instructions referred to in subsection (1) shall specify the nature and frequency of inspections, testing and maintenance.

(3) The inspection, testing and maintenance referred to in subsection (1) shall be performed by a qualified person who

(a) complies with the instructions referred to in that subsection; and

(b) makes and signs a report of each inspection, test or maintenance work performed by the qualified person.

(4) A report referred to in paragraph (3)(b) shall

(a) include the date of the inspection, testing or maintenance performed by the qualified person;

(b) identify the materials handling equipment that was inspected, tested or maintained; and

(c) set out the safety observations of the qualified person.

(5) The employer shall keep at the work place at which the motorized or manual materials handling equipment is located a copy of

(a) the instructions referred to in subsection (1) for as long as the materials handling equipment is in use; and

(b) the report referred to in paragraph (3)(b) for a period of one year after the report is signed. SOR/96-400, s. 1.

### *Mobile Cranes*

**14.21** Mobile cranes shall be inspected, tested and maintained in accordance with the requirements of section 5 of CSA Standard Z150-1974, *Safety Code for Mobile Cranes*, dated 1974, and its supplement Z150S1-1977 entitled *Supplement 1-1977 to CSA Standard Z150-1974 Safety Code for Mobile Cranes*, published in 1977. SOR/88-632, s. 60(F); SOR/96-400, s. 1.

### *Split Rim Wheels*

**14.22** (1) Every employer whose employees maintain or repair motorized materials handling equipment equipped with split rim wheels shall set out in writing instructions for those employees on the maintenance and repair of those wheels.

(2) Instructions referred to in subsection (1) shall include instructions on training, inspection, installation, guarding, compatibility of parts used and repairs relating to the assembling and disassembling of split rim wheels.

(3) The employer shall keep a copy of the instructions referred to in subsection (1) at the work

place in which the motorized materials handling equipment referred to in that subsection is kept for as long as the equipment is in use. SOR/88-632, s. 61(F); SOR/96-400, s. 1.

### *Instruction and Training*

**14.23** (1) Subject to subsection (2), every employer shall ensure that every operator of motorized materials handling equipment has been instructed and trained in the procedures to be followed for

(a) its inspection;

(b) its fuelling; and

(c) its safe and proper use, in accordance with any instructions provided by the manufacturer and taking into account the conditions of the work place in which the operator will operate the materials handling equipment.

(2) Subsection (1) does not apply to an operator who, under the direct supervision of a qualified person, is being instructed and trained to use motorized materials handling equipment or on the matters referred to in that subsection.

(3) An employer shall ensure that every operator of manual materials handling equipment receives on-the-job training by a qualified person on the procedures to be followed for

(a) its inspection; and

(b) its safe and proper use, in accordance with any instructions of the manufacturer and taking into account the conditions of the work place in which the operator will operate the manual materials handling equipment and the operator's physical capabilities.

(4) Every employer shall keep a written record, in respect of an operator, of any instruction or training referred to in subsection (1) for as long as the operator remains in the employer's employment. SOR/96-400, s. 1.

### *Qualifications*

**14.24** No employer shall require an employee to operate motorized or manual materials handling equipment unless the employee

(a) is an operator; and

(b) where the laws of the province in which the equipment is operated require an operator's licence, possesses an operator's licence issued by any province. SOR/88-632, s. 62(F); SOR/96-400, s. 1.

## *Signals*

**14.25** No employer shall require an operator to operate motorized materials handling equipment unless the operator

(a) is directed by a signaller; or

(b) has an unobstructed view of the area in which the equipment is to be operated. SOR/88-632, s. 63; SOR/96-400, s. 1.

**14.26** (1) Every employer who wishes to use signals to direct the movement of motorized materials handling equipment shall establish a single code of signals to be used by signallers in all of the employer's work places.

(2) Subject to subsection (3), signals from the code referred to in subsection (1) shall be given by a signaller, who may use only those signals.

(3) A signal to stop given in an emergency by any person granted access to the work place by the employer shall be obeyed by an operator.

(4) No signaller shall perform duties other than signalling while the motorized materials handling equipment under the signaller's direction is in operation.

(5) Where any movement of motorized materials handling equipment that is directed by a signaller poses a risk to the safety of any person, the signaller shall not give the signal to move until that person is warned of, or protected from, the risk.

(6) Where the operator of any motorized materials handling equipment does not understand a signal, the operator shall consider that signal to be a stop signal. SOR/96-400, s. 1.

**14.27** (1) Subject to subsection (2), where the use by a signaller of visual signals will not be an effective means of communication, the employer shall provide the signaller and the operator with a telephone, radio or other audible signalling device.

(2) No radio transmitting equipment shall be used in a work place for the transmission of signals where such use may activate electric blasting equipment in that place.

(3) Where a signalling device referred to in subsection (1) functions unreliably or improperly



and the operation of any motorized materials handling equipment cannot be safely directed by another means of signalling, use of the motorized materials handling equipment shall be discontinued until the signalling device is repaired or replaced.

(4) Where an employee finds a defect in radio transmitting signalling equipment that may render it unsafe for use, the employee shall report the defect to the employer as soon as possible. SOR/94-263, s. 54(F); SOR/96-400, s. 1.

### *Gradients*

**14.28** No employee shall operate and no employer shall permit an employee to operate motorized materials handling equipment on a ramp with a gradient in excess of the lesser of

(a) the gradient that is recommended as safe by the manufacturer of the motorized materials handling equipment, either loaded or unloaded, as applicable; and

(b) such gradient as a qualified person determines to be safe, having regard to the mechanical condition of the motorized materials handling equipment and its load and traction. SOR/96-400, s. 1.

### *Repairs*

**14.29** (1) Motorized or manual materials handling equipment that creates a safety or health hazard owing to a defect in the materials handling equipment shall be taken out of service until it has been repaired or modified by a qualified person.

(2) Subject to subsection (3), any repair, modification or replacement of a part of any motorized or manual materials handling equipment shall at least maintain the safety factor of the materials handling equipment or part.

(3) If a part of less strength or quality than the original part is used in the repair, modification or replacement of a part of any motorized or manual materials handling equipment, the employer shall restrict the use of the materials handling equipment to such loading and use as will ensure the retention of the original safety factor of the equipment or part.

(4) An employer shall keep a record of any repair or modification referred to in subsection (1) and of any restriction on use imposed pursuant to subsection (3).

### *Transporting and Positioning Employees*

**14.30** (1) Motorized or manual materials handling equipment shall not be used for transporting an employee and no employee shall so use the equipment unless the equipment is specifically designed for that purpose.

(2) Motorized or manual materials handling equipment shall not be used for hoisting or positioning an employee, unless the equipment is equipped with a platform, bucket or basket designed for those purposes.

(3) Any motorized materials handling equipment that is normally used for transporting employees from place to place in a work place shall be equipped with

(a) a mechanical parking brake; and

(b) a hydraulic or pneumatic braking system. SOR/96-400, s. 1.

### *Loading, Unloading and Maintenance While in Motion*

**14.31** No materials, goods or things shall be picked up from, or placed on, any motorized or manual materials handling equipment while the equipment is in motion unless the equipment is specifically designed for that purpose. SOR/96-400, s. 1.

**14.32** Except in the case of an emergency, no employee shall get on or off of motorized or manual materials handling equipment while it is in motion. SOR/96-400, s. 1.

**14.33** (1) Subject to subsection (2), no repair, maintenance or cleaning work shall be performed on motorized or manual materials handling equipment while the materials handling equipment is in use.

(2) Fixed parts of motorized or manual materials handling equipment may be repaired, maintained or cleaned while the materials handling equipment is being used if the parts are so isolated or guarded that the use of the materials handling equipment does not present a risk to the safety of the employee performing the repair, maintenance or cleaning work. SOR/88-632, s. 64(F); SOR/94-263, s. 55(F); SOR/96-400, s. 1.

### *Positioning the Load*

**14.34** (1) Where motorized or manual materials handling equipment is travelling with a raised or suspended load, its operator shall ensure that the load is carried as close to the ground or floor as the situation permits and shall not in any case transport the load at or beyond the point at which the loaded equipment becomes unstable.

(2) Any load, other than bulk materials, that would likely slide on or fall from motorized or manual materials handling equipment resulting in a hazardous condition shall be secured to prevent such movement. SOR/96-400, s. 1.

### *Tools*

**14.35** Tools, tool boxes or spare parts that are carried on motorized or manual materials handling equipment shall be securely stored. SOR/96-400, s. 1.

### *Housekeeping*

**14.36** The floor, cab and other occupied parts of motorized materials handling equipment shall be kept free of any grease, oil, materials, tools, equipment or other hazards that may cause an employee to slip or trip or may create a fire hazard or otherwise interfere with the safe operation of the equipment. SOR/88-632, s. 65(F); SOR/96-400, s. 1.

### *Parking*

**14.37** (1) No motorized or manual materials handling equipment shall be parked in a corridor, aisle, doorway or other place where it may interfere with the safe movement of persons, materials, goods or things.

(2) Where motorized or manual materials handling equipment is required to enter or exit a vehicle other than a railway car to load or unload materials, goods or things to or from the vehicle, the vehicle shall be immobilized and secured against accidental movement, by means additional to the vehicle's braking system.

(3) Where motorized or manual materials handling equipment is required to enter or exit a railway car to load or unload materials, goods or things to or from the railway car, the railway car shall be immobilized.

(4) Any motorized materials handling equipment that is left unattended shall be immobilized against accidental movement, by applying a parking brake or other braking device. SOR/88-632, s. 66(F); SOR/96-400, s. 1.

### *Materials Handling Area*

**14.38** (1) In this section, "materials handling area" means an area within which materials handling equipment may create a hazard to any person.

(2) An employer shall cause warning signs to be posted, or a signaller to be in control, at the approaches to any materials handling area while materials handling operations are in progress.

(3) Only the following persons may enter a materials handling area while materials handling operations are in progress:

(a) a safety officer;

(b) an employee whose presence in the materials handling area is essential to the conduct, supervision or safety of the materials handling operations; or

(c) a person who has been authorized by the employer to be in the materials handling area while materials handling operations are in progress.

(4) If any person other than a person referred to in subsection (3) enters a materials handling area, the employer shall cause the materials handling operations in the immediate vicinity of the unauthorized person to be immediately discontinued and to remain discontinued until the person has left that materials handling area. SOR/88-68, s. 14; SOR/88-632, s. 67(F); SOR/94-263, s. 65(F); SOR/96-400, s. 1.

### *Hazard Areas*

**14.39** (1) Subject to subsection (2), no motorized or manual materials handling equipment shall be used in an area in which it may contact an electrical cable, a pipeline containing a hazardous substance or any other hazard known to the employer, unless the employer has informed the operator of the presence and location of the hazard and of the safety clearance that the operator must maintain with respect to the hazard.

(2) Where an employer is unable to determine with reasonable certainty the location of an electrical cable or a pipeline containing a hazardous substance, the electrical cable shall be de-energized or the pipeline shut down and drained before any activity involving the use of motorized materials handling equipment commences within the area of possible contact with the electrical cable or the pipeline. SOR/96-400, s. 1.

### *Rear Dumping*

**14.40** Where rear-dumping motorized materials handling equipment is used to discharge a load at the edge of a sudden drop in grade level that may cause the equipment to tip and in order to prevent the motorized materials handling equipment from being backed over the edge,

(a) a bumping block shall be used; or

(b) a signaller shall give directions to the operator of the equipment. SOR/96-400, s. 1.

### *Fuelling*

**14.41** Where motorized materials handling equipment is fuelled in a work place, a qualified person shall do the fuelling in accordance with procedures referred to in subsection 14.23(1) in a place that is well ventilated so that the vapours from the fuel will be dissipated quickly. SOR/96-400, s. 1.

### *Ropes, Slings and Chains*

**14.42** (1) The employer shall, with respect to the use and maintenance of any rope, sling or chain or any attachment or fitting thereon used by an employee, adopt and implement the recommendations set out in Chapter 10 of the *Accident Prevention Manual for Business and Industry*, 10th edition, published by the National Safety Council of the United States, dated 1992.

(2) Subsection (1) does not apply to ropes, slings or chains or to any attachments or fittings thereon that comply with the requirements of the *Tackle Regulations*. SOR/96-400, s. 1.

### *Safe Working Loads*

**14.43** (1) Motorized or manual materials handling equipment shall be legibly marked with sufficient information so as to enable the operator to determine its safe working load.

(2) No motorized or manual materials handling equipment shall be used with a load that exceeds its safe working load. SOR/96-400, s. 1.

### *Aisles and Corridors*

**14.44** (1) An employer shall provide a clearly marked pathway for the exclusive use of pedestrians and persons using wheelchairs and other similar devices that is not less than 750 mm wide along one side of an aisle, corridor or other course of travel that is found in a work place and that

(a) is a principal traffic route for mobile equipment, pedestrians and persons using wheelchairs and other similar devices; and

(b) exceeds 15 m in length.

(2) Subsection (1) does not apply where a signaller or traffic lights are provided for the purpose of controlling traffic and protecting persons.

(3) Where an aisle, corridor or other course of travel that is a principal traffic route in a work place intersects with another route, an employer shall cause warning signs marked with the words "DANGEROUS INTERSECTION -- CROISEMENT DANGEREUX", in letters not less than 50 mm in height on a contrasting background, to be posted along the approaches to the intersection.

(4) At blind corners, mirrors shall be installed that permit a mobile equipment operator to see a pedestrian, a person using a wheelchair or other similar device, a vehicle or mobile equipment approaching the blind corner. SOR/96-400, s. 1; SOR/96-525, s. 15.

### *Clearances*

**14.45** (1) In any passageway that is regularly travelled by motorized or manual materials handling equipment, the employer shall ensure that

(a) an overhead clearance is at least 150 mm above

(i) that part of the materials handling equipment or its load that is the highest when the materials handling equipment is in its highest normal operating position at the point of clearance, and

(ii) the top of the head of the operator or any other employee required to ride on the materials handling equipment when occupying the highest normal position for the operator or employee at the point of clearance; and

(b) a side clearance is sufficiently wide to permit the motorized or manual materials handling equipment and its load to be manoeuvred safely by an operator, but in no case less than 150 mm on each side measured from the furthest projecting part of the equipment or its load, when the equipment is being operated in a normal manner.

(2) Where an overhead clearance measured in accordance with subparagraph (1)(a)(i) or (ii) is less than 300 mm, the employer shall cause

(a) the top of the doorway or object that restricts the clearance to be marked with a distinguishing colour or mark; and

(b) the height of the passageway in metres to be shown near the top of the passageway in letters that are not less than 50 mm in height and are on a contrasting background.

(3) Subparagraph (l)(a)(i) and subsection (2) do not apply in respect of

(a) motorized materials handling equipment whose course of travel is controlled by fixed rails or guides;

(b) that portion of the route of any motorized or manual materials handling equipment that is inside a railway car, truck or trailer truck, including the warehouse doorway leading directly to it; or

(c) a load the nature of which precludes compliance with that subparagraph or subsection if precautions are taken to prevent contact with objects that may restrict the movement of the equipment. SOR/88-632, s. 68(F); SOR/96-400, s. 1.

### DIVISION III MANUAL HANDLING OF MATERIALS

**14.46** (1) Where, because of the weight, size, shape, toxicity or other characteristic of materials, goods or things, the manual handling of materials, goods or things may be hazardous to the safety or health of an employee, the employer shall issue instructions that the materials, goods or things shall, where reasonably practicable, not be handled manually.

(2) For the purposes of subsection (1), the employer shall take into account the frequency and duration of manual lifting and the distances and terrain over which an object is to be manually lifted or carried in deciding whether the manual handling of the materials, goods or things may be hazardous to the safety or health of an employee. SOR/96-400, s. 1.

**14.47** No employer shall require an employee who is an office worker and whose primary tasks do not include manual lifting or carrying to manually lift or carry materials, goods or things in excess of 23 kg. SOR/96-400, s. 1.

**14.48** Where an employee is required manually to lift or carry loads weighing in excess of 10 kg, the employer shall instruct and train the employee

(a) in a safe method of lifting and carrying the loads that will minimize the stress on the body; and

(b) in a work procedure appropriate to the employee's physical condition and the conditions of the work place. SOR/96-400, s. 1.

**14.49** Where an employee is required manually to lift or carry loads weighing in excess of 45 kg, the employer shall give instructions to the employee in accordance with section 14.48 that are

- (a) set out in writing;
- (b) readily available to the employee; and
- (c) kept by the employer for a period of two years after they cease to apply. SOR/88-632, s. 69(F); SOR/96-400, s. 1.

## DIVISION IV STORAGE OF MATERIALS

**14.50** (1) All materials, goods and things shall be stored in the work place in such a manner that the maximum safe load carrying capacity of the floor or other supporting structures is not exceeded.

(2) All materials, goods or things shall be stored and placed in such a manner that employees are not required manually to lift materials, goods or things in a manner that would lead to overextension of or excessive strain on the body.

(3) All materials, goods or things shall be stored in a manner so that

- (a) light in the storage area is not reduced below the levels required by Part VI;
- (b) there is no obstruction or encroachment of passageways, traffic lanes or exits;
- (c) the safe operation of motorized or manual materials handling equipment is not impeded;
- (d) the ready access to or the operation of fire fighting equipment is not obstructed;
- (e) the operation of fixed fire protection equipment is not interfered with; and
- (f) there is no risk to the safety or health of any employee. SOR/96-400, s. 1.

## DIVISION V TRANSITIONAL PROVISIONS



**14.51** (1) Subject to subsection (3), motorized materials handling equipment that is in use at the time this amendment comes into force, and that meets the requirements of this Part as it read immediately before the coming into force of this amendment, is exempt from having to comply with the amendment as long as the motorized materials handling equipment continues to meet those requirements.

(2) Subject to subsection (3), motorized or manual materials handling equipment that is in use at the time an amendment to a standard or code incorporated by subsection 14.6(1) or 14.8(2) or section 14.18 or 14.19 comes into force and that complies with the standard or code as it read immediately before the coming into force of the amendment, is exempt from having to comply with the amendment as long as the motorized or manual materials handling equipment continues to meet that standard or code.

(3) An employer shall ensure that, wherever reasonably practicable, equipment referred to in

(a) subsection (1) meets the requirements of subsection 14.3(3) or 14.6(2), section 14.10, 14.11 or 14.13 or paragraph 14.16(1)(b); and

(b) subsection (2) complies with an amendment referred to in that subsection.

(4) Where it is not reasonably practicable for materials handling equipment in use at the time an amendment referred to in subsection (1) or (2) comes into force to comply with the amendment, the employer whose employees use the equipment shall notify the safety and health committee or the safety and health representative, if either exists, of the non-compliance. SOR/96-400, s. 1.

## PART XV HAZARDOUS OCCURRENCE INVESTIGATION, RECORDING AND REPORTING

### *Interpretation*

**15.1** In this Part,

"disabling injury" means an employment injury or an occupational disease that

(a) prevents an employee from reporting for work or from effectively performing all the duties connected with the employee's regular work on any day subsequent to the day on which the injury or disease occurred, whether or not that subsequent day is a working day for that employee,

(b) results in the loss by an employee of a body member or part thereof or in the complete loss of the usefulness of a body member or part thereof, or

(c) results in the permanent impairment of a body function of an employee; (*blessure invalidante*)

"district office" means, in respect of a work place, the district office of the Department of Labour that is

(a) closest to the work place, and

(b) in the administrative region of that Department in which the work place is situated; (*bureau de district*)

"minor injury" means an employment injury or an occupational disease for which medical treatment is provided and excludes a disabling injury. (*blessure légère*) SOR/89-479, s. 1.

### *Application*

**15.2** (1) Subject to subsection (2), this Part does not apply in respect of employees employed in a coal mine or in an underground portion of any other type of mine.

(2) Section 15.10 applies in respect of employees employed in a coal mine. SOR/89-479, s. 1; SOR/90-180, s. 3.

### *Reports by Employee*

**15.3** Where an employee becomes aware of an accident or other occurrence arising in the course of or in connection with the employee's work that has caused or is likely to cause injury to that employee or to any other person, the employee shall, without delay, report the accident or other occurrence to his employer, orally or in writing. SOR/89-479, s. 1.

### *Investigations*

**15.4** (1) Where an employer becomes aware of an accident, occupational disease or other hazardous occurrence affecting any of his employees in the course of employment, the employer shall, without delay,

(a) appoint a qualified person to carry out an investigation of the hazardous occurrence;

(b) notify the safety and health committee or the safety and health representative, if either exists, of the hazardous occurrence and of the name of the person appointed to investigate it; and

(c) take necessary measures to prevent a recurrence of the hazardous occurrence.

(2) Where the hazardous occurrence referred to in subsection (1) is an accident involving a motor vehicle on a public road that is investigated by a police authority, the investigation referred to in paragraph (1)(a) shall be carried out by obtaining from the appropriate police authority a copy of its report respecting the accident.

(3) As soon as possible after receipt of the report referred to in subsection (2), the employer shall provide a copy thereof to the safety and health committee or the safety and health representative, if either exists. SOR/89-479, s. 1; SOR/94-263, s. 56.

### *Telephone or Telex Reports*

**15.5** The employer shall report to a safety officer, by telephone or telex, the date, time, location and nature of any accident, occupational disease or other hazardous occurrence referred to in section 15.4 that had one of the following results, as soon as possible but not later than 24 hours after becoming aware of that result, namely,

(a) the death of an employee;

(b) a disabling injury to two or more employees;

(c) the loss by an employee of a body member or a part thereof or the complete loss of the usefulness of a body member or a part thereof;

(d) the permanent impairment of a body function of an employee;

(e) an explosion;

(f) damage to a boiler or pressure vessel that results in fire or the rupture of the boiler or pressure vessel; or

(g) any damage to an elevating device that renders it unserviceable, or a free fall of an elevating device. SOR/89-479, s. 1; SOR/94-263, s. 57.

### *Records*

**15.6** (1) The employer shall, within 72 hours after a hazardous occurrence referred to in paragraph 15.5(f) or (g), record in writing

(a) a description of the hazardous occurrence and the date, time and location of the occurrence;

(b) the causes of the occurrence; and

(c) the corrective measures taken or the reason for not taking corrective measures.

(2) The employer shall, without delay, submit a copy of the record referred to in subsection (1) to the safety and health committee or the safety and health representative, if either exists.

SOR/89-479, s. 1; SOR/94-263, s. 58.

### *Minor Injury Records*

**15.7** (1) Every employer shall keep a record of each minor injury of which the employer is aware that affects any employee in the course of employment.

(2) A record kept pursuant to subsection (1) shall contain

(a) the date, time and location of the occurrence that resulted in the minor injury;

(b) the name of the employee affected;

(c) a brief description of the minor injury; and

(d) the causes of the minor injury. SOR/89-479, s. 1.

### *Written Reports*

**15.8** (1) The employer shall make a report in writing, without delay, in the form set out in Schedule I to this Part setting out the information required by that form, including the results of the investigation referred to in paragraph 15.4(1)(a), where that investigation discloses that the hazardous occurrence resulted in any one of the following circumstances:

(a) a disabling injury to an employee;

(b) an electric shock, toxic atmosphere or oxygen deficient atmosphere that caused an employee to lose consciousness;

(c) the implementation of rescue, revival or other similar emergency procedures; or

(d) a fire or an explosion.

(2) The employer shall submit a copy of the report referred to in subsection (1)

(a) without delay, to the safety and health committee or the safety and health representative, if either exists; and

(b) within 14 days after the hazardous occurrence, to a safety officer at the regional office or district office. SOR/89-479, s. 1; SOR/94-263, s. 59.

**15.9** Where an accident referred to in subsection 15.4(2) results in a circumstance referred to in subsection 15.8(1), the employer shall, within 14 days after the receipt of the police report of the accident, submit a copy of that report to a safety officer at the regional office or district office. SOR/89-479, s. 1.

### *Annual Report*

**15.10** (1) Every employer shall, not later than March 1 in each year, submit to the Minister a written report setting out the number of accidents, occupational diseases and other hazardous occurrences of which the employer is aware affecting any employee in the course of employment during the 12 month period ending on December 31 of the preceding year.

(2) The report referred to in subsection (1) shall be in the form set out in Schedule II to this Part and shall contain the information required by that form. SOR/89-479, s. 1.

### *Retention of Reports and Records*

**15.11** Every employer shall keep a copy of

(a) each report submitted pursuant to section 15.9 or subsection 15.10(1) for a period of 10 years following the submission of the report to the safety officer or the Minister; and

(b) the record or report referred to in subsection 15.6(1), 15.7(1) or 15.8(1) for a period of 10 years following the hazardous occurrence. SOR/89-479, s. 1.

# HAZARDOUS OCCURRENCE INVESTIGATION REPORT FORM

GRAPHIC IS NOT DISPLAYED, SEE SOR/89-479, S. 1

SOR/89-479, s. 1.

## SCHEDULE II

(s. 15.10)

# EMPLOYER'S ANNUAL HAZARDOUS OCCURRENCE REPORT FORM

GRAPHIC IS NOT DISPLAYED, SEE SOR/89-479, S. 1

SOR/89-479, s. 1.

## PART XVI FIRST AID

### *Interpretation*

**16.1** The definitions in this section apply in this Part.

"ambulance response time" means the time required for an ambulance with trained personnel and emergency medical equipment to reach the workplace from the nearest point of dispatch under normal travel conditions. (*délai d'intervention ambulancière*)

"first aid attendant" means a holder of a valid basic or standard first aid certificate. (*secouriste*)

"first aid station" means a place, other than a first aid room, at which first aid supplies or equipment are stored. (*poste de secours*)

"health unit" means a facility that is under the charge of a physician or a person who is registered as a registered nurse under the laws of any province, and that, if it is under the control of the employer, meets the minimum requirements of a first aid room contained in this Part. (*service de santé*)

"medical treatment facility" means a hospital, medical clinic or physician's office, at which

emergency medical treatment can be dispensed. (*installation de traitement médical*)

"remote workplace" means a workplace for which the ambulance response time is more than two hours. (*lieu de travail isolé*)

"standard first aid certificate" means the certificate issued by an approved organization for successful completion of a two-day first aid course. (*certificat de secourisme général*)  
SOR/88-68, s. 13(E); SOR/2000-328, s. 2.

### *General*

**16.2** (1) Every employer shall establish, and keep up to date, written instructions that provide for the prompt rendering of first aid to an employee for an injury, an occupational disease or an illness.

(2) The employer shall keep a copy of the instructions readily available for consultation by employees. SOR/88-632, s. 70(F); SOR/2000-328, s. 2.

### *First Aid Attendants*

**16.3** (1) At every workplace at which six or more employees are working at any time, the employer shall ensure that there is a first aid attendant.

(2) At every remote workplace at which two or more employees are working at any time, the employer shall ensure that there is a first aid attendant.

(3) At every workplace at which an employee is working on live high voltage electrical equipment, the employer shall ensure that

(a) a first aid attendant is readily available; or

(b) at least one of the employees has the training necessary to provide resuscitation by mouth-to-mouth resuscitation, cardiopulmonary resuscitation or an equivalent direct method.

(4) At every workplace that is required to have a first aid attendant, the employer shall ensure that the first aid attendant at the workplace is qualified by having at least

(a) if the workplace is an office workplace for which the ambulance response time is

(i) up to two hours, a basic first aid certificate, or

(ii) more than two hours, a standard first aid certificate;

(b) if the workplace is any other workplace, other than a workplace in a wilderness area, and the ambulance response time for the workplace is

(i) less than twenty minutes, a basic first aid certificate, or

(ii) twenty minutes or more but not more than two hours, a standard first aid certificate; and

(c) if the workplace is in a wilderness area, a standard first aid certificate and wilderness first aid training that is specially designed to meet the first aid needs of persons who work, live or travel in such an area. SOR/2000-328, s. 2.

**16.4** (1) A first aid attendant referred to in section 16.3 or paragraph 16.10(1)(a)

(a) shall be assigned to a first aid station or first aid room;

(b) shall be readily available and accessible to employees during working hours;

(c) shall render first aid to employees who are injured or ill at the workplace;

(d) shall, if required, accompany an injured or ill employee to a health unit or a medical treatment facility and render first aid in transit;

(e) shall, in providing care to an injured or ill employee, not be overruled by anyone not trained in first aid; and

(f) shall be in charge of providing care for the injured or ill employee until the treatment is complete or the employee is under the care of an equally or more qualified caregiver.

(2) The first aid attendant referred to in subsection (1)

(a) shall work close to the first aid station or first aid room to which the first aid attendant is assigned; and

(b) shall not be assigned duties that will interfere with the prompt and adequate rendering of first aid. SOR/2000-328, s. 2.

### *First Aid Stations*



**16.5** (1) At least one first aid station shall be provided for every workplace.

(2) In multi-storey buildings, the location of first aid stations shall be such that employees are no more than two stories from a first aid station.

(3) Every first aid station shall be

(a) located at or near the workplace;

(b) clearly identified by a conspicuous sign; and

(c) readily available and accessible during all working hours.

(4) The employer shall inspect every first aid station regularly, at least monthly, and shall ensure that its contents are maintained in a clean, dry and serviceable condition.

(5) Subsection (1) does not apply if a first aid room, health unit or medical treatment facility that meets the requirements of subsection (3) is provided by the employer. SOR/88-632, s. 71(F); SOR/2000-328, s. 2.

### *Communication of Information*

**16.6** (1) Subject to subsection (2), the employer shall post and keep posted or have readily available in a conspicuous place accessible to every employee in each workplace

(a) information regarding first aid to be rendered for any injury, occupational disease or illness;

(b) information regarding the location of first aid stations and first aid rooms;

(c) at every first aid station and first aid room, a list of first aid attendants, and information on how they may be located;

(d) near the telephones, a list of telephone numbers kept up-to-date for use in emergencies; and

(e) information regarding transport procedures for injured employees.

(2) At a remote workplace or in a motor vehicle, the information and lists referred to in subsection (1) shall be provided and retained with the first aid kit. SOR/96-525, s. 16; SOR/2000-328, s. 2.

## *First Aid Supplies and Equipment*

**16.7** (1) At every workplace with a number of employees set out in column 1 of an item of Schedule I to this Part, the employer shall ensure that there is provided a first aid kit of the type set out in column 2 of that item.

(2) A first aid kit of type A, B, C or D shall contain the first aid supplies and equipment set out in column 1 of an item of Schedule II to this Part in the quantity, if any, set out in column 2 of that item for that type.

(3) A first aid kit of type A for use in a remote workplace shall, in addition to the contents required by subsection (2), contain the first aid supplies and equipment set out in column 1 of an item of Schedule III to this Part in the quantity set out in column 2 of that item.

(4) Prescription drugs or other medications not set out in Schedules II, III and IV to this Part shall not be stored in first aid kits or with first aid supplies. SOR/2000-328, s. 2.

**16.8** (1) Subject to subsection (2), if a hazard for skin or eye injury from a hazardous substance exists in the workplace, the employer shall ensure that shower facilities to wash the skin and eye wash facilities to irrigate the eyes are provided for immediate use by employees.

(2) If it is not practicable to comply with subsection (1), the employer shall provide portable equipment that may be used in place of the facilities referred to in that subsection.

(3) If, due to adverse or extreme weather conditions, it is not possible to comply with either subsection (1) or (2), the employer shall provide personal protection equipment for all employees likely to be exposed to the hazardous substance for all parts of their bodies that may be injured because of the presence of hazardous substances in the workplace. SOR/88-68, s. 14; SOR/88-632, s. 72(F); SOR/94-263, ss. 60(F), 65(F); SOR/2000-328, s. 2.

## *First Aid Rooms*

**16.9** (1) If 200 or more employees are working at any time in a workplace, the employer shall ensure that a first aid room is provided and that it is clearly identified by a conspicuous sign.

(2) A first aid room may be used for purposes other than first aid if

(a) the minimum floor area required for first aid is maintained;

(b) there is no potential for delay in the administration of first aid; and

(c) the use for those other purposes will not impede the treatment of an injured employee or pose a hazard to employees.

(3) Subsection (1) does not apply if a health unit or medical treatment facility at which medical treatment is provided without charge to employees is readily accessible. SOR/88-632, s. 73(F); SOR/94-263, s. 61(F); SOR/2000-328, s. 2.

**16.10** (1) Every first aid room provided in accordance with section 16.9 shall be

(a) under the supervision of a first aid attendant;

(b) located as close as practicable to the workplace and within easy access to a toilet room;

(c) situated on a minimum floor area of 10 m<sup>2</sup> and constructed to allow for optimum ease of access to persons carrying a patient on a stretcher;

(d) maintained in an orderly and sanitary condition; and

(e) equipped with

(i) a washbasin supplied with cold water and hot water that meets the standards set out in Part IX,

(ii) a storage cupboard and a counter,

(iii) a separate cubicle or curtained-off area with a cot or bed equipped with a moisture-protected mattress and two moisture-protected pillows,

(iv) a table and two or more chairs,

(v) a telephone, or other effective means of communication, and an up-to-date list of appropriate emergency contacts and telephone numbers for use in emergencies, and

(vi) the first aid supplies and equipment set out in Schedule IV to this Part.

(2) In every first aid room referred to in subsection (1),

(a) the air shall be changed at least once each hour; and

(b) the temperature

(i) shall be maintained at not less than 21°C, measured one meter above the floor,

when the outdoor temperature is 21oC or less, and

(ii) to the extent that is reasonably practicable, when the outdoor temperature in the shade exceeds 24oC, shall not exceed the outdoor temperature. SOR/88-632, s. 74(F); SOR/2000-328, s. 2.

### *Transportation*

**16.11** Before assigning employees to a workplace, the employer shall

(a) ensure that for that workplace there is an ambulance service or other suitable means of transporting an injured or ill employee to a health unit or medical treatment facility; and

(b) provide for that workplace a means of quickly summoning the ambulance service or other suitable means of transportation. SOR/2000-328, s. 2.

### *Teaching First Aid*

**16.12** (1) An organization that wants to obtain the approval of the Minister for offering courses in first aid shall apply for it in writing to the Minister.

(2) The application shall be accompanied by a description of the proposed courses.

(3) If the application is for approval for offering a course in advanced first aid, including wilderness first aid, in relation to a particular workplace, the application shall be accompanied also by a report from the employer at that workplace, prepared in consultation with the safety and health committee or safety and health representative, if either exists at that workplace, that identifies the first aid training requirements for the workplace, having regard to the particular nature of that workplace.

(4) The Minister shall approve an application by an organization to offer courses in basic and standard first aid if the organization's training program contains the elements and meets the criteria set out in Schedule V to this Part.

(5) The Minister shall approve an application by an organization to offer courses in advanced first aid, including wilderness first aid, in relation to a particular workplace if the organization's training program is appropriate for that workplace, having regard to the training requirements identified in the report referred to in subsection (3).

(6) Subject to subsections (7) and (8), a letter of approval from the Minister is valid for a period of five years starting on the date of issue.

(7) The Minister may suspend or cancel the approval of an organization under subsection (4) if the organization's training program no longer contains the elements or meets the criteria set out in Schedule V to this Part.

(8) The Minister may suspend or cancel the approval of an organization under subsection (5) in relation to a workplace if the organization's training program is no longer appropriate for that workplace.

(9) Basic and standard first aid certificates, and approvals for advanced first aid courses, including wilderness first aid courses, are valid for a maximum of three years starting on their date of issue. SOR/88-632, s. 75; SOR/2000-328, s. 2.

### *Records*

**16.13** (1) If first aid is required by this Part to be rendered, the first aid attendant who renders the first aid shall

(a) enter in a first aid record the following information:

(i) the date and time of the reporting of the injury or illness,

(ii) the full name of the injured or ill employee,

(iii) the date, time and location of the occurrence of the injury or illness,

(iv) a brief description of the injury or illness,

(v) a brief description of the first aid rendered, if any,

(vi) a brief description of arrangements made for the treatment or transportation of the injured or ill employee, and

(vii) the names of witnesses, if applicable; and

(b) sign the first aid record beneath the information entered in accordance with paragraph (a).

(2) The information referred to in subsection (1) shall be entered

(a) if first aid was rendered to an employee at a remote workplace detached from the main party or on a snowmobile or other small vehicle, in the first aid record stored in the first aid

kit at the site of the main party or work site; and

(b) in any other case, in the first aid record stored in the first aid kit.

(3) The employer shall keep a first aid record containing information entered in accordance with subsection (2) for a period of two years beginning on the date of that entry.

(4) Persons with access to first aid records shall keep the information contained in the records confidential, except as required for the purposes of meeting reporting obligations under Part XV.

(5) On receiving a written request from a workers' compensation authority for the province where the workplace is located or a medical practitioner, the employer shall provide an employee with a copy of the first aid record pertaining to the employee's treatment.

(6) The employer shall maintain a record of the expiry dates of the first aid certificates of the first aid attendants and make it readily available to them. SOR/2000-328, s. 2.

**SCHEDULE I**  
*(Subsection 16.7(1))*  
**REQUIREMENTS FOR FIRST AID KITS**

Column 1	Column 2
Item Number of Employees	Type of First Aid Kit
1. 2 to 5 (subject to item 5)	A
2. 6 or more, where the first aid attendant is required to have at least a basic first aid certificate	B
3. 6 or more, where the first aid attendant is required to have at least a standard first aid certificate	C
4. 1, detached from the main party in a remote workplace	D

5. 1 to 3, travelling by snowmobile or other small vehicle, other than a truck, van D or automobile

*Note: The contents of first aid kits A, B, C and D are set out in Schedule II.*

SOR/2000-328, s. 2.

**SCHEDULE II**  
*(Subsections 16.7(2) and (4))*  
**CONTENT OF FIRST AID KITS**

Column 1	Column 2			
	Quantity According to Type of First Aid Kit:			
Item Supplies and Equipment	A	B	C	D
1. Antiseptic swabs (10-pack)	1	1	4	1
2. Scissors: super shears	--	--	1	--
3. Bandages: adhesive strips	12	48	100	6
4. Plastic bags: waterproof, sealable	--	--	2	--
5. Bandages: triangular, 100 cm, folded	2	6	8	1
6. Blankets: emergency, pocket size	1	--	--	--
7. First Aid Kit Container	1	1	1	1
8. Dressings: combination, 12.7 cm x 20.3 cm	--	--	6	--

9.	Dressings: compress, 7.5 cm x 12 cm	1	2	--	--
10.	Dressings: gauze sterile 10.4 cm x 10.4 cm	4	12	24	2
11.	Dressings: gauze, non-sterile 10.4 cm x 10.4 cm	10	40	200	--
12.	Forceps: splinter	1	1	1	--
13.	Gloves: disposable	4	8	40	--
14.	Mouth-to-mouth resuscitation mask with one-way valve	1	1	1	--
15.	Record book: First Aid	1	1	1	1
16.	Scissors: bandage	1	1	--	--
17.	Self-adhering gauze bandage: 7.5 cm x 4.5 cm	2	6	24	--
18.	Tape: adhesive, 1.2 cm x 4.5 cm	--	--	--	1
19.	Tape: adhesive, 2.5 cm x 4.5 cm	1	2	4	--
	Additional supplies and equipment maintained outside of the kit itself (for remote workplace)				
20.	Blankets: bed type	--	--	2	--
21.	Splint set	--	1	1	--
22.	Stretcher	--	--	1	--

SOR/2000-328, s. 2.

**SCHEDULE III**  
*(Subsections 16.7(3) and (4))*



# ADDITIONAL FIRST AID SUPPLIES AND EQUIPMENT FOR REMOTE WORKPLACES

Column 1	Column 2
Item Supplies and Equipment	Quantity
1. Guide on wilderness first aid	1
2. 30 mL (6 teaspoonsful) table salt, sealed in strong plastic bag	1
3. 30 mL (6 teaspoonsful) baking soda (not baking powder), sealed in strong plastic bag	1
4. 60 mL (12 teaspoonsful) sugar, sealed in strong plastic bag	1
5. 1 litre plastic bags	5
6. Large plastic garbage bags	2
7. Patient treatment record forms, which include vital sign recording sections	3
8. Oral temperature thermometer in an unbreakable case	1
9. Emergency signalling mirror	1
10. Blanket: emergency, pocket size	1
11. Anti-itch ointment/lotion/swabs (10-pack)	2
12. Scissors: super shears	1
13. Bags: disposable, waterproof, emesis	4
14. Burn jelly (5 mL)	4
15. Plastic bags: waterproof and sealable for disposal of contaminated waste	2

- |                              |   |
|------------------------------|---|
| 16. Cold packs: instant type | 2 |
| 17. Hot packs: instant type  | 2 |

*Note: In addition to the type A first aid kit and the above items, an effective means of communication with the base camp of operations must be available. The contents of a type A first aid kit are set out in Schedule II.*

SOR/2000-328, s. 2.

**SCHEDULE IV**  
*(Subsection 16.7(4) and subparagraph 16.10(1)(e)(vi))*  
**FIRST AID ROOM SUPPLIES AND EQUIPMENT**

Column 1	Column 2
Item Supplies and Equipment	Quantity
1. First aid kit: type C (containing the supplies and equipment set out in Schedule II)	1
2. Basin: wash, portable, 4.7 L capacity	1
3. Bedding: disposable, 2 sheets and 2 pillow cases (set)	6
4. Tray: instrument	1
5. Waste receptacle: covered	1
6. Soap: liquid, with dispenser	1
7. Towels: disposable, with dispenser	1
8. Cups: box of disposable, with dispenser	1

SOR/2000-328, s. 2.

**SCHEDULE V**  
*(Subsections 16.12(4) and (7))*

*Subjects to be Included in the Courses*

1. Basic first aid:

- (a) the provision of basic first aid and the first aid attendant's role and obligations in relation to basic first aid;
- (b) emergency scene management;
- (c) cardiopulmonary resuscitation;
- (d) medical emergencies;
- (e) shock and unconsciousness;
- (f) anti-contamination procedures; and
- (g) wounds and bleeding.

2. Standard first aid:

- (a) the provision of standard first aid and the first aid attendant's role and obligations in relation to standard first aid;
- (b) emergency scene management;
- (c) cardiopulmonary resuscitation;
- (d) medical emergencies;
- (e) shock and unconsciousness;

- (f) anti-contamination procedures;
- (g) wounds and bleeding;
- (h) fractures and their immobilization;
- (i) chest injuries;
- (j) head and spinal injuries;
- (k) muscle, ligament and joint injuries;
- (l) burns;
- (m) eye injuries;
- (n) pelvic, genital and abdominal injuries;
- (o) movement and transportation of casualty;
- (p) environmental illnesses and injuries;
- (q) toxicological emergencies; and
- (r) evacuation and transportation of casualties.

### *Testing Criteria*

#### 1. Practical evaluation:

- (a) evaluation points and criteria.

#### 2. Written evaluation:

- (a) example and marking scheme.

### *Qualifications of Instructors*

#### 1. Training program:

- (a) course content;
- (b) length of the program; and
- (c) evaluation process.

2. Recertification procedures:

- (a) recertification schedule;
- (b) instructor quality assurance procedures; and
- (c) instructor's guide.

*Other Criteria*

1. Student reference material:

- (a) current volume submitted for review.

2. Lesson plans:

- (a) lesson contents; and
- (b) lesson teaching outline.

3. Audio-Visual aids.

4. First aid certificate:

- (a) example submitted for authentication.

5. Cardiopulmonary resuscitation certificate:

- (a) example submitted for authentication.

SOR/2000-328, s. 2.

## *Interpretation*

**17.1** In this Part, "emergency evacuation plan" means a written plan for use in an emergency, prepared in accordance with section 17.4.

## *Application*

**17.2** This Part does not apply in respect of employees employed in the underground workings of mines.

## *Fire Protection Equipment*

**17.3** (1) Fire protection equipment shall be installed, inspected and maintained in every building in which there is a work place in accordance with the standards set out in Parts 6 and 7 of the National Fire Code.

(2) [Repealed, SOR/2000-374, s. 6]

(3) All fire protection equipment shall be maintained and repaired by a qualified person.  
SOR/2000-374, s. 6.

## *Emergency Evacuation Plan*

**17.4** (1) Where more than 50 employees are working in a building at any time, the employer or employers of those employees shall prepare an emergency evacuation plan for all employees, including those who require special assistance, after consultation with

(a) the safety and health committee or safety and health representative of the employees, if either exists; and

(b) the employers of any persons working in the building to whom the Act does not apply.

(2) An emergency evacuation plan referred to in subsection (1) shall contain

(a) a plan of the building, showing

(i) the name, if any, and the address of the building,

- (ii) the name and address of the owner of the building,
  - (iii) the names and locations of the tenants of the building,
  - (iv) the date of preparation of the plan,
  - (v) the scale of the plan,
  - (vi) the location of the building in relation to nearby streets and in relation to all buildings and other structures located within 30 m of the building,
  - (vii) the maximum number of persons normally occupying the building at any time,
  - (viii) a horizontal projection of the building, showing thereon its principal dimensions, and
  - (ix) the number of floors above and below ground level;
- (b) a plan of each floor of the building, showing
- (i) the name, if any, and the address of the building,
  - (ii) the date of preparation of the plan,
  - (iii) the scale of the plan,
  - (iv) a horizontal projection of the floor, showing thereon its principal dimensions,
  - (v) the number of the floor to which the plan applies,
  - (vi) the maximum number of persons normally occupying the floor at any time,
  - (vii) the location of all fire escapes, fire exits, stairways, elevating devices, main corridors and other means of exit,
  - (viii) the location of all fire protection equipment, and
  - (ix) the location of the main electric power switches for the lighting system, elevating devices, principal heating, ventilation and air-conditioning equipment and other electrical equipment;
- (c) a full description of the evacuation procedures to be followed in evacuating the building, with the time required to complete the evacuation, including

- (i) activating the fire alarm,
- (ii) notifying the fire department, and
- (iii) evacuating employees who require special assistance; and

(d) the names, room numbers and telephone numbers of the chief emergency warden and the deputy chief emergency warden of the building appointed by the employer or employers under section 17.7.

(3) An emergency evacuation plan referred to in subsection (1) shall be kept up-to-date and shall take into account any changes in the building or the nature of its occupancy.

(4) An employer referred to in subsection (1) shall keep a copy of the up-to-date emergency evacuation plan in the building to which it refers. SOR/94-263, s. 62; SOR/96-525, s. 17.

### *Emergency Procedures*

**17.5** (1) Every employer shall, after consultation with the safety and health committee or the safety and health representative of the employees, if either exists, and with the employers of any persons working in the building to whom the Act does not apply, prepare emergency procedures

(a) to be implemented if any person commits or threatens to commit an act that is likely to be hazardous to the safety and health of the employer or any of his employees;

(b) where there is a possibility of an accumulation, spill or leak of a hazardous substance in a work place controlled by him, to be implemented in the event of such an accumulation, spill or leak;

(c) where more than 50 employees are working in a building at any time, to be implemented where evacuation is not an appropriate means of ensuring the safety and health of employees;

(d) to be implemented in the event of a failure of the lighting system; and

(e) to be implemented in the event of a fire.

(2) The emergency procedures referred to in subsection (1) shall contain

(a) an emergency evacuation plan, where applicable, or a plan for evacuating employees



who require special assistance to be implemented in the event of a fire;

(b) a full description of the procedures to be followed;

(c) the location of the emergency equipment provided by the employer; and

(d) a plan of the building, showing

(i) the name, if any, and the address of the building, and

(ii) the name and address of the owner of the building.

(3) The plan for the evacuation of employees who require special assistance shall be established in consultation with those employees. SOR/88-68, s. 14; SOR/94-263, s. 63; SOR/96-525, s. 18.

### *Instructions and Training*

**17.6** (1) Every employee shall be instructed and trained in

(a) the procedures to be followed by him in the event of an emergency; and

(b) the location, use and operation of fire protection equipment and emergency equipment provided by the employer.

(2) Notices that set out the details of the evacuation plans and procedures referred to in paragraphs 17.4(2)(c) and 17.5(2)(a) and (b) shall be posted at locations accessible to every employee at the work place. SOR/96-525, s. 19.

### *Emergency Wardens*

**17.7** (1) Where an employer or employers have prepared an emergency evacuation plan for a building, the employer or employers shall appoint

(a) a chief emergency warden and a deputy chief emergency warden for that building;

(b) an emergency warden and a deputy emergency warden for each floor of the building that is occupied by employees of the employer or employers; and

(c) monitors for any employee who require special assistance in evacuating the building.

(2) The chief emergency warden and deputy chief emergency warden appointed for a building shall be employees who are normally employed in the building.

(3) The emergency warden and the deputy emergency warden appointed for a floor in a building shall be employees who are normally employed on that floor and monitors for an employee who requires special assistance shall be employees who are normally employed on the same floor as the employee requiring special assistance. SOR/96-525, s. 20.

**17.8** (1) Every emergency warden, deputy emergency warden and monitor appointed under section 17.7 shall be instructed and trained in

(a) his responsibilities under the emergency evacuation plan and the emergency procedures referred to in paragraph 17.5(1)(c); and

(b) the use of fire protection equipment.

(2) A record of all instruction and training provided in accordance with subsection (1) shall be kept by the employer in the work place to which it applies for a period of two years from the date on which the instruction or training is provided. SOR/88-632, s. 76(E); SOR/96-525, s. 21.

### *Inspections*

**17.9** (1) In addition to the inspections carried out under section 17.3, a visual inspection of every building to which subsection 17.4(1) applies shall be carried out by a qualified person at least once every six months and shall include an inspection of all fire escapes, exits, stairways and fire protection equipment in the building in order to ensure that they are in serviceable condition and ready for use at all times.

(2) A record of each inspection carried out in accordance with subsection (1) shall be dated and signed by the person who made the inspection and kept by the employer in the building to which it applies for a period of two years from the date on which it is signed.

### *Meetings of Emergency Wardens and Drills*

**17.10** (1) At least once every year and after any change is made in the emergency evacuation plan or the emergency procedures referred to in paragraph 17.5(1)(c) for a building,

(a) emergency wardens, deputy emergency wardens and monitors appointed under section 17.7 and employees requiring special assistance shall meet for the purpose of ensuring that they are familiar with the emergency evacuation plan and the emergency procedures and their responsibilities thereunder; and

(b) an evacuation or emergency drill shall be conducted for the employees in that building.

(2) The employer or employers shall keep a record of each meeting and drill referred to in subsection (1) in the building referred to in that subsection for a period of two years from the date of the meeting or the drill.

(3) The record referred to in subsection (2) shall contain

(a) in respect of each meeting,

(i) the date of the meeting,

(ii) the names and titles of those present, and

(iii) a summary of the matters discussed; and

(b) in respect of each drill,

(i) the date and time of the drill, and

(ii) where applicable, the length of time taken to evacuate the building.

(4) The employer shall notify the local fire department for the building where an evacuation or emergency drill is to take place at least 24 hours in advance of the date and time of the drill. SOR/88-632, s. 77(E); SOR/96-525, s. 22.

### *Fire Hazard Areas*

**17.11** (1) Subject to subsection (2), no person shall, in a fire hazard area,

(a) use any equipment, machinery or tool of a type that may provide a source of ignition; or

(b) smoke or use an open flame or other source of ignition.

(2) Where it is not reasonably practicable to avoid performing work involving the use of any equipment, machinery or tool that may provide a source of ignition in an area that has an atmosphere that contains or is likely to contain explosive concentrations of combustible dust or in an area where combustible dust has accumulated in a sufficient quantity to be a fire hazard, the following shall apply:

(a) the atmosphere and surfaces in the area where the work is to be performed and within

that portion of the surrounding area that is accessible to sparks or pieces of hot metal produced by the work shall be substantially free of combustible dust;

(b) where any equipment, machinery or tool produces combustible dust that may reach the areas referred to in paragraph (a), the equipment, machinery or tool shall be made inoperative prior to and during the time the work is being performed;

(c) in so far as is practicable, the area where the work is to be performed shall be enclosed to prevent the escape of sparks or pieces of hot metal produced by the work;

(d) all openings in floors and walls through which sparks or pieces of hot metal produced by the work may pass shall be sealed or covered to prevent such passage;

(e) any combustible materials within the areas referred to in paragraph (a) shall be removed or, if this is not reasonably practicable, shall be covered with a non-combustible protective covering;

(f) floors and walls of combustible material within the areas referred to in paragraph (a) shall be protected from the fire hazard by

(i) drenching the surfaces of the floors and walls with water, or

(ii) covering the floors and walls with a non-combustible protective covering;

(g) the work shall be performed under the supervision of a qualified person, who shall remain in the work area while the work is performed and for 30 minutes thereafter; and

(h) there shall be readily available in the work area at least one hand-held portable fire extinguisher and

(i) a water hose at least 25 mm in diameter that is connected to a water supply line, or

(ii) a supply of not less than 200 L of water and a bucket. SOR/88-632, s. 78(F); SOR/94-263, s. 64.

**17.12** Signs shall be posted in conspicuous places at all entrances to a fire hazard area

(a) identifying the area as a fire hazard area; and

(b) prohibiting the use of an open flame or other source of ignition in the area.

# PART XVIII

## DIVING OPERATIONS

### *Definitions*

**18.1** The definitions in this section apply in this Part.

"contaminated environment" means

- (a) a point of discharge of effluent from a sewer, a water or sewage treatment plant or an industrial plant;
- (b) a site where chemical or biological effluent has accumulated; or
- (c) the site of an oil or radioactive spill. (*environnement contaminé*)

"decompression table" means a table or set of tables that shows a schedule of rates for the safe ascent of a diver from depth in order to minimize the risk of decompression sickness. (*table de décompression*)

"dive supervisor" means a qualified person who has been designated by the employer to be in charge of a diving operation at the dive site, including the safety and health of its divers. (*chef de plongée*)

"diver" means a qualified person who performs work under water. (*plongeur*)

"diver's flag" means the rectangular red flag set out in Schedule I, each side of which is not less than 50 cm in length, that has a white diagonal stripe extending from the tip of the hoist to the bottom of the flag. (*pavillon du plongeur*)

"diver's tender" means a qualified person who attends to a diver for the duration of a dive. (*assistant du plongeur*)

"hyperbaric chamber" means a pressure vessel and associated equipment designed to subject humans to greater-than-atmospheric pressures. (*caisson hyperbare*)

"International Code Flag A" means the white and dark blue flag set out in Schedule II, which is not less than 1 m in height. (*pavillon A du code international*)

"liveboating" means the support of a diving operation from a vessel that is not at anchor, made fast to the shore or a fixed structure, or aground. (*plongée avec bateau-soutien*)

"no-decompression limit" means the maximum time that can be spent at a depth without requiring a decompression stop. (*limite de remontée sans palier*)

"surface supply dive" means a diving operation where a diver is supplied with breathing mixtures by a life support umbilical from the surface. (*plongée non autonome*)

"therapeutic recompression" means the treatment of a diver in a hyperbaric chamber in accordance with generally accepted tables and practices. (*recompression thérapeutique*)

"type 1 dives" means diving operations

(a) the primary purpose of which is

- (i) to conduct scientific, archaeological or other research operations, or
- (ii) to gather evidence or information relating to a crime;

(b) that

- (i) do not require decompression,
- (ii) do not involve diving in the vicinity of underwater pressure differentials,
- (iii) are not related to the search, construction, repair or inspection of ships, bridge piers, wharves, dry docks, underwater tunnels, or water control and water intake facilities, and
- (iv) do not involve using underwater welding or cutting equipment; and

(c) the depth of which does not exceed 40 m. (*plongées de type 1*)

"type 2 dives" means diving operations other than type 1 dives. (*plongées de type 2*)  
SOR/98-456, s. 1.

### *Application*

**18.2** This Part does not apply to diving operations to which the *Canada Oil and Gas Diving Regulations*, the *Nova Scotia Offshore Area Petroleum Diving Regulations* or the *Newfoundland Offshore Area Petroleum Diving Regulations* apply. SOR/98-456, s. 1.

**18.3** (1) Division I applies to type 1 dives and type 2 dives.

(2) Division II applies to type 2 dives. SOR/98-456, s. 1.

## DIVISION I TYPE 1 DIVES AND TYPE 2 DIVES

### Written Procedures

**18.4** (1) Every employer shall establish written procedures and requirements that are to be followed and met by employees involved in diving operations and that specify which of those procedures and requirements

(a) apply to each type of dive in which the employees are likely to engage, including the qualifications of the dive team members;

(b) are to be implemented or met to counter any known hazards, including those arising out of contaminated or potentially contaminated environments, low visibility, hazardous water flow conditions and entrapment; and

(c) deal with emergency situations and the evacuation of dive team members.

(2) Every employer shall review the procedures referred to in paragraph (1)(c) at least once a year and, if necessary, revise those procedures.

(3) The procedures and requirements referred to in subsection (1) shall be available to all employees involved in diving operations. SOR/98-456, s. 1.

### Instruction and Training

**18.5** (1) Every employer shall ensure that an employee required to dive has received instruction and training with respect to

(a) the types of dives in which the employee is likely to participate; and

(b) the equipment that the employee is likely to use.

(2) Every employer shall ensure that an employee involved in diving operations demonstrates on an annual basis that the employee is competent to perform the types of dives in which the employee is likely to participate.

(3) Every employer shall ensure that persons who are not employees and who dive with

employees demonstrate that they are competent to perform the types of dives in which they will participate. SOR/98-456, s. 1.

**18.6** (1) Every employer shall ensure that an employee required to dive has been trained in first aid and cardio-pulmonary resuscitation and in the recognition of the symptoms and the management of diving-related injuries.

(2) Where oxygen equipment for therapeutic purposes is provided at the dive site, the employer shall ensure that an employee required to dive or act as a diver's tender is trained in its use. SOR/98-456, s. 1.

## Medical Evaluations

**18.7** (1) Every employer shall ensure that an employee required to dive has

(a) received a medical examination within the last two years; and

(b) been declared fit to dive, or fit to dive with specified restrictions, by the examining physician.

(2) For the purposes of subsection (1), the examining physician shall use as a guideline the factors and tests listed in Appendices A and B of CSA Standard CAN/CSA-Z275.2-92, *Occupational Safety Code for Diving Operations*, published in English in April 1992 and in French in February 1994, as amended from time to time.

(3) Where the physician examining the employee pursuant to subsection (1) declares the employee fit to dive with specified restrictions, the employer shall not permit the employee to dive otherwise than in accordance with the specified restrictions.

(4) Every employer shall ensure that a diver who has been treated for a pressure-related injury or illness does not dive unless written clearance for further diving is given by a physician. SOR/98-456, s. 1.

## Fitness to Dive

**18.8** (1) If a diver considers himself or herself unfit to dive owing to illness, fatigue or any other cause, the diver shall inform the employer of that fact.

(2) An employer who has been notified pursuant to subsection (1) shall not permit the employee to dive. SOR/98-456, s. 1.



## Dive Plan

**18.9** (1) Every employer shall ensure that, for each dive, the dive team develops a dive plan that identifies the surface and underwater conditions and hazards likely to be encountered, including those arising from contaminated environments and underwater pressure differentials, and that specifies

- (a) the duties of each dive team member;
- (b) the diving equipment to be used;
- (c) the breathing supply requirements, including the reserve supply;
- (d) the thermal protection to be used;
- (e) the repetitive dive factor;
- (f) the no-decompression limit;
- (g) the emergency procedures to be followed;
- (h) the communication methods to be used;
- (i) for a type 1 dive that is a scuba dive, whether there is a need for a diver's tender;
- (j) the circumstances in which the dive must be terminated;
- (k) the procedures to be followed to ensure that machinery, equipment or devices that could create a hazard have been locked out; and
- (l) whether lifelines must be used.

(2) In the case of a type 1 dive, the dive plan referred to in subsection (1) shall also specify whether there is a need for a standby diver.

(3) In the case of a type 2 dive that requires decompression, the dive plan referred to in subsection (1) shall also specify the decompression schedule to be used. SOR/98-456, s. 1.

## Dive Team

**18.10** (1) Subject to subsections (3) and (4) and Division II, every employer shall ensure that a dive team consisting of at least two divers is present at every dive site.

(2) One member of the dive team referred to in subsection (1) shall be designated as the dive supervisor.

(3) A diver's tender shall be present at any surface supply dive.

(4) A dive boat operator shall be present at any dive carried out from a boat or vessel. SOR/98-456, s. 1.

**18.11** Every employer shall ensure that, for the duration of a surface supply dive, the diver's tender devotes his or her entire time and attention to the work of a diver's tender. SOR/98-456, s. 1.

**18.12** Every employer shall ensure that, for the duration of a type 2 dive carried out from a boat or vessel, the dive boat operator devotes his or her entire time and attention to the work as a dive boat operator. SOR/98-456, s. 1.

**18.13** A standby diver shall be present at all times when type 2 dives are in progress. SOR/98-456, s. 1.

**18.14** Where a standby diver is needed pursuant to subsection 18.9(2) or section 18.13, the standby diver shall

(a) be trained and equipped to operate at the depth at which and in the circumstances in which a submerged diver is operating;

(b) be readily available to assist the submerged diver in the event of an emergency; and

(c) not dive or be required to dive except in an emergency. SOR/98-456, s. 1.

### Emergency Assistance

**18.15** Every employer shall, for the purposes of paragraph 18.9(1)(g), arrange for

(a) assistance in the event of an emergency;

(b) medical support on a 24-hour-a-day basis and a suitable means of communication between the dive site and that medical support; and

(c) evacuation of a diver to a hyperbaric chamber if necessary. SOR/98-456, s. 1.

### Pressure-related Injury

**18.16** Every employer shall ensure that, when a diver shows any indication of a pressure-related injury or requires therapeutic recompression,

(a) the necessary first-aid treatment is initiated; and

(b) the medical support referred to in paragraph 18.15(b) is notified immediately. SOR/98-456, s. 1.

## Decompression

**18.17** Diving operations, repetitive dives and the treatment of divers shall be carried out in accordance with generally accepted decompression tables and procedures. SOR/98-456, s. 1.

## Identification of Dive Site

**18.18** Every employer shall ensure that the following flags are conspicuously displayed at or in close proximity to the dive site whenever diving operations are conducted in areas of marine traffic:

(a) the International Code Flag A, hoisted from any vessel, boat or platform used in support of a dive in such a manner as to ensure all-round visibility of the dive site; and

(b) one or more diver's flags from a white buoy which may be equipped with

(i) a light, in which case the light shall be yellow and flashing, and

(ii) reflecting material, in which case the reflecting material shall be yellow. SOR/98-456, s. 1.

## Supervision

**18.19** Every diving operation shall be conducted under the supervision of a dive supervisor. SOR/98-456, s. 1.

**18.20** The primary duties of the dive supervisor shall include

(a) ensuring that every member of the dive team is familiar with the dive plan;

(b) ensuring that every member of the dive team understands the member's duties, including the emergency procedures to be followed;

(c) ensuring, before each dive, that all necessary equipment is available and in good operating condition; and

(d) supervising the entire diving operation. SOR/98-456, s. 1.

## Hazards

**18.21** Immediately before each dive, the dive supervisor shall review the nature of any hazards at the dive site and ensure that all divers are fully aware of the hazards likely to be encountered in the diving operation. SOR/98-456, s. 1.

## Communications

**18.22** Every employer shall, for the purposes of paragraph 18.9(1)(h), ensure that all means of communication used at the dive site are

(a) appropriate for the operation; and

(b) understood by all members of the dive team. SOR/98-456, s. 1.

## Breathing Supply

**18.23** (1) Every employer shall ensure that a reserve breathing supply sufficient to allow the safe termination of a dive is immediately available to the diver.

(2) Where required by the dive plan, the reserve breathing supply referred to in subsection (1) shall be carried by the diver. SOR/98-456, s. 1.

**18.24** Every employer shall ensure that air compressors and filter systems are tested annually and produce breathing mixtures that meet the requirements of clause 3.8 of CSA Standard CAN/CSA-Z275.2-92, *Occupational Safety Code for Diving Operations*, published in English in April 1992 and in French in February 1994, as amended from time to time. SOR/98-456, s. 1.

**18.25** Where a dive plan requires that oxygen for therapeutic purposes be available, the employer shall supply

(a) demand-type oxygen therapy equipment; and

(b) an adequate quantity of oxygen. SOR/98-456, s. 1.

## Diving Equipment

**18.26** (1) Every employer shall ensure that all diving equipment used by employees is

(a) designed for its intended use and maintained in a condition that ensures its continuing operation for the purpose and at the depth for which it was designed; and

(b) inspected, tested, maintained and calibrated by a qualified person at intervals recommended by the manufacturer and whenever the equipment is thought to be defective.

(2) Every employer shall ensure that diving equipment used by persons who are not employees and who are granted access to the work place is in a condition that ensures its operation for the purpose and at the depth for which it was designed. SOR/98-456, s. 1.

**18.27** (1) Immediately before each dive, every diver shall check that all the equipment the diver requires is present, properly fastened in place and functioning.

(2) Before beginning a descent, every diver shall conduct the check specified in subsection (1) again in the water. SOR/98-456, s. 1.

**18.28** (1) Every employer shall ensure that whenever diving operations are carried out from a diving station located more than 2 m above the water, the divers are transported through the air-water interface by a cage, basket or platform.

(2) Every employer shall ensure that a stationary platform from which a diver works, or any cage, basket or platform on or in which a diver is lowered to or raised from an underwater work place, and any associated hoisting devices and tackle,

(a) are used for the purpose for which they were designed; and

(b) do not in themselves create a hazard.

(3) Any cage, basket or platform and any associated equipment referred to in subsection (2) shall be dedicated to the diving operations until the dive is completed. SOR/98-456, s. 1.

**18.29** Floating equipment used in diving operations, including a vessel that is anchored or moored, shall not be moved or relocated while a diver is in the water unless the dive supervisor agrees to the move or relocation. SOR/98-456, s. 1.

**18.30** The employer shall ensure that, when a floating platform, vessel or boat is used in support of the dive, it remains on site at all times while a diver is in the water. SOR/98-456, s. 1.

**18.31** (1) Every employer shall ensure that, where a dive plan requires the use of a lifeline to

tether a diver, the lifeline

(a) is free of knots and splices, other than knots and splices necessary to attach the lifeline to the diver and the dive site;

(b) has a breaking strength of not less than 1400 kg;

(c) is secured to the diver so as to prevent loss of contact with the diver; and

(d) is secured at the surface to a safe point of anchorage.

(2) A lifeline shall always be used in dives taking place under ice.

(3) Every employer shall ensure that a lifeline is tended at all times by a diver's tender. SOR/98-456, s. 1.

**18.32** Every submersible pressure gauge and every depth gauge shall be inspected by a qualified person

(a) before being used for the first time;

(b) thereafter at intervals not exceeding 12 months; and

(c) whenever the gauge is thought to be defective. SOR/98-456, s. 1.

**18.33** (1) Where an employee finds a defect in any diving equipment, including pressure gauges and depth gauges, that may render it unsafe for use, the employee shall immediately report the defect to the employer.

(2) An employer shall mark or tag as unsafe and remove from service any diving equipment, including pressure gauges and depth gauges, that may be used by employees where a defect may render it unsafe for use. SOR/98-456, s. 1.

## Termination of Dive

**18.34** A dive shall be terminated in accordance with the dive plan referred to in subsection 18.9(1) or when

(a) a dive team member requests termination;

(b) a diver loses contact with or fails to respond correctly to a communication from a diving partner;

(c) a diver loses contact with or fails to respond correctly to a communication from the diver's tender;

(d) a diver's primary breathing supply fails; or

(e) a diver becomes aware of any sign of a malfunction of equipment or any sign or symptom of diver distress. SOR/98-456, s. 1.

### Observation After Diving

**18.35** Every employer shall ensure that, on completion of a dive, a diver remains under observation for a period of time sufficient to ensure the safety and health of the diver. SOR/98-456, s. 1.

### Flying After Diving

**18.36** (1) An employer shall not allow a diver to fly at an altitude greater than 300 m above the altitude of the dive site unless the following period of time has elapsed:

(a) 12 hours following a no-decompression dive;

(b) 24 hours following a decompression dive; or

(c) such time as is specified by a physician who treated the diver for a pressure-related injury.

(2) Subsection (1) does not apply to an emergency air evacuation.

(3) In the event of an emergency air evacuation, provision shall be made to furnish the diver with oxygen, and the flight altitude and in-flight conditions shall be those recommended by the attending physician or dive supervisor. SOR/98-456, s. 1.

### Reports and Records

**18.37** (1) Every diver shall report to the employer any occurrence that has caused a diving-related injury to the diver.

(2) The employer shall investigate the occurrence reported pursuant to subsection (1) and keep a written record of its findings. SOR/98-456, s. 1.

**18.38** (1) Every employer shall ensure that a dive record is kept and maintained for every diver.

(2) The record referred to in subsection (1) shall contain, for each dive,

- (a) the date of the dive;
- (b) the dive location;
- (c) the name of the diver;
- (d) the name of the standby diver, if any;
- (e) the name of the diver's tender, if any;
- (f) the signature of the diver and the dive supervisor; and
- (g) the breathing mixture used, if other than air.

(3) The record referred to in subsection (1) shall also contain, for each type 1 dive,

- (a) the total elapsed time, measured in minutes, from the time the diver leaves the surface to the time the diver begins final ascent, rounded to the next whole minute;
- (b) the maximum depth reached; and
- (c) any unusual incident or condition, including emergency decompression time.

(4) The record referred to in subsection (1) shall also contain, for each type 2 dive,

- (a) the type of diving equipment used;
- (b) the time the diver leaves the surface;
- (c) the maximum depth reached;
- (d) the time the diver begins final ascent;
- (e) the time the diver reaches the surface;
- (f) the decompression schedule used, if any; and
- (g) any unusual incident or condition.



(5) The employer shall keep the record referred to in subsection (1) for a period of 12 months after the date of the dive. SOR/98-456, s. 1.

**18.39** (1) Every employer shall keep a dated dive record for each diver that shall include

(a) the year in which the dive occurs;

(b) the maximum depth reached;

(c) the total elapsed time, measured in minutes, from the time the diver leaves the surface to the time the diver begins final ascent, rounded to the next whole minute;

(d) the breathing mixture used, if other than air;

(e) any unusual incident or condition;

(f) any occurrence reported pursuant to subsection 18.37(1); and

(g) a copy of any record referred to in subsection 18.37(2).

(2) The employer shall annually supply the record referred to in subsection (1) to the diver and keep a copy for a period of five years after the date on which the diver ceases to be employed by the employer. SOR/98-456, s. 1.

**18.40** Every employer shall keep a record of all diver instruction and training received and all competency demonstrations given pursuant to section 18.5, for as long as the employee is employed by the employer as a diver. SOR/98-456, s. 1.

**18.41** Every employer shall maintain a record of each air quality test performed pursuant to section 18.24 for a period of five years after the date on which the test was made. SOR/98-456, s. 1.

**18.42** Every employer shall maintain a record of each equipment inspection, test, maintenance and calibration performed pursuant to paragraph 18.26(1)(b) for a period of five years after the date on which the inspection, test, maintenance or calibration was performed. SOR/98-456, s. 1.

## DIVISION II TYPE 2 DIVES

**18.43** Underwater approaches to water control and intake facilities where underwater pressure differentials may be encountered shall be made in accordance with sections 18.44 to 18.46. SOR/98-456, s. 1.

**18.44** Every employer shall ensure that a diver working near a facility referred to in section 18.43 wears a lifeline tended from a position outside the approach area. SOR/98-456, s. 1.

**18.45** Every employer shall ensure that any diver required to approach an underwater intake pipe, tunnel or duct is provided with the means to differentiate the intake from any other similar intake in the dive area. SOR/98-456, s. 1.

**18.46** (1) Subject to subsection (2), every employer shall ensure that

(a) a diver is not allowed to approach any underwater intake or structure where underwater pressure differentials may be encountered until the flow of water is stopped or controlled; and

(b) the flow of water is not re-established until the diver leaves the water or until the dive supervisor has determined that the diver is clear of the approach area referred to in paragraph (a).

(2) Where the flow of water referred to in subsection (1) cannot be stopped, the employer shall assess the safety of a diver approaching the intake by determining flow patterns using reliable indicators, direct measurements or calculations. SOR/98-456, s. 1.

## Diving Hazards

**18.47** No employer shall permit a diver to approach a work place that may be hazardous because of the operation of machinery or equipment, unless the machinery or equipment is secured against inadvertent movement and made inoperable for the duration of the dive. SOR/98-456, s. 1.

**18.48** Where there is a likelihood that a diver may be entrapped, the employer shall ensure that

(a) a two-way voice communication system between the diver and the diver's tender is provided; and

(b) a second dive team, equipped to rescue a diver in the event of an emergency, is present at the dive site. SOR/98-456, s. 1.

## Use of Explosives

**18.49** (1) The initiation of underwater explosive charges at a dive site shall be under the direct control of the dive supervisor.

(2) A two-way voice communication system shall be provided when explosives are being used at a dive site, unless the voice communication system itself would pose a hazard. SOR/98-456, s. 1.

### Hyperbaric Chambers

**18.50** Every employer shall ensure that a hyperbaric chamber meeting the requirements of CSA Standard CAN/CSA Z275.1-93, *Hyperbaric Facilities*, published in English in December 1993 and in French in January 1995, as amended from time to time, for Class A (double-lock type) hyperbaric chambers, is available and in operable condition whenever

(a) a decompression dive is occurring; or

(b) the depth of a dive is to exceed 40 m. SOR/98-456, s. 1.

**18.51** Every employer shall ensure that a hyperbaric chamber is operated by a qualified person. SOR/98-456, s. 1.

### Alternative Energy Sources

**18.52** (1) Every employer shall ensure that a second source of power capable of supplying sufficient power to operate all essential diving equipment is available in the event of failure of the primary power source.

(2) Every employer shall ensure that the second source of power referred to in subsection (1) is capable of

(a) being rapidly brought on line; and

(b) operating all equipment essential to the diving operation. SOR/98-456, s. 1.

### Surface Supply Type 2 Dives

**18.53** Sections 18.54 to 18.62 apply to surface supply type 2 dives. SOR/98-456, s. 1.

**18.54** Where the planned depth of a dive does not exceed 40 m, there shall be at least three persons present at the dive site, of whom

(a) at least two are divers, one of whom is a standby diver; and

(b) at least one is a diver's tender. SOR/98-456, s. 1.

**18.55** The diver's tender or the standby diver of a diving operation, the depth of which does not exceed 40 m, shall be designated as the dive supervisor. SOR/98-456, s. 1.

**18.56** Where the planned depth of a dive exceeds 40 m, there shall be at least four persons at the dive site, of whom

(a) at least two are divers, one of whom is a standby diver;

(b) one is the dive supervisor; and

(c) one is the diver's tender. SOR/98-456, s. 1.

**18.57** Every employer shall ensure that, except in an emergency, each surface supply diver in the water has a separate diver's tender. SOR/98-456, s. 1.

**18.58** (1) The voice communication system provided between a diver and the surface shall

(a) allow the diver's breathing to be heard at the surface; and

(b) include a recording system where the maximum depth of the dive is greater than 55 m.

(2) An emergency signal system must be in effect during a diving operation to supplement the primary communication system. SOR/98-456, s. 1.

**18.59** A reserve breathing supply appropriate for the dive shall be carried by each diver. SOR/98-456, s. 1.

**18.60** Every employer shall ensure that nonreturn valves are

(a) fitted to all diving helmets and surface supply diving masks; and

(b) checked daily before the commencement of diving operations in accordance with the manufacturer's recommendations. SOR/98-456, s. 1.

**18.61** Every employer shall ensure that every life support umbilical incorporates a lifeline rigged to prevent stress on the air line. SOR/98-456, s. 1.

**18.62** Every employer shall ensure that, in a liveboating operation,

(a) a method that will prevent the lifeline or life support umbilical from becoming entangled in the propellers is used;

(b) the diver's tender is a qualified person for the type of tending used; and

(c) the vessel operator is a qualified person. SOR/98-456, s. 1.

## Type 2 Scuba Diving

**18.63** Sections 18.64 to 18.67 apply to type 2 dives in the course of which divers use scuba. SOR/98-456, s. 1.

**18.64** In a diving operation where the diver is tethered to the surface by a lifeline or float, there shall be at least three persons present at the dive site, of whom

(a) one is a standby diver; and

(b) one is a diver's tender. SOR/98-456, s. 1.

**18.65** In a diving operation where the diver is not tethered to the surface by a lifeline or float, there shall be a through-water, two-way voice communication system between the divers and between the divers and the surface, and at least four persons present at the dive site, of whom

(a) three are divers, one of whom is a standby diver; and

(b) one is a diver's tender. SOR/98-456, s. 1.

**18.66** One of the employees on the surface shall be designated as the dive supervisor of the scuba diving operation. SOR/98-456, s. 1.

**18.67** (1) Subject to subsection (2), dives shall be limited to a depth not exceeding 40 m.

(2) A diver may dive to a depth greater than 40 m for the purpose of saving a life provided that, where conditions permit, the diver is

(a) secured by a lifeline; and

(b) tended by a diver's tender. SOR/98-456, s. 1.

## SCHEDULE I

*(Sections 18.1 and 18.18)*

**DIVER'S FLAG**

Red rectangle with white diagonal stripe

GRAPHIC IS NOT DISPLAYED, SEE SOR/98-456, S. 1

SOR/98-456, s. 1

**SCHEDULE II**

*(Sections 18.1 and 18.18)*

**INTERNATIONAL CODE FLAG A**

White rectangle with dark blue tails

GRAPHIC IS NOT DISPLAYED, SEE SOR/98-456, S. 1

SOR/98-456, s. 1