Oil and Gas Occupational Safety and Health Regulations



Department of Justice Canada

Ministère de la Justice





PARTI GENERAL

Interpretation

1.1 In these Regulations,

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

"advanced first aid certificate" means the certificate issued by an approved organization for the successful completion of a first aid course of at least five days' duration, other than a mariners' first aid course; (certificat de secourisme avancé)

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

"API" means the American Petroleum Institute; (API)

- "approved organization" means the St. John Ambulance, the Canadian Red Cross Society or the Workers' Compensation Board of British Columbia; (organisme approuvé)
- "ASME" means the American Society of Mechanical Engineers; (ASME)

"basket" means a personnel transfer basket; (nacelle)

- "Canadian Electrical Code" means CSA Standard C22.1-1990 Canadian Electrical Code, Part I, dated January 1990; (Code canadien de l'électricité)
- "CPR course" means a training course in cardiopulmonary resuscitation based on the publication of the Journal of the American Medical Association entitled *Standards and Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiac Care*, dated June 6, 1986, as reprinted by the American Heart Association; (*cours RCP*)

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

- "dangerous substance" [Repealed, SOR/88-199, s. 1]
- "drill floor" means, in respect of a drilling rig or drilling unit, the stable platform surrounding the slip setting area that provides support for employees during drilling operations; (*plancher de forage*)
- "drilling rig" means the plant and associated support equipment used to make a hole or well by boring or other means for geophysical, exploration or production purposes; (*appareil de forage*)
- "drilling unit" means a drillship, submersible, semi-submersible, barge, jack-up or other vessel used in drilling and includes a drilling rig and other related facilities; (*installation de forage*)
- "electrical equipment" means equipment for the generation, distribution or use of electricity; (*outillage électrique*)
- "elevating device" means an escalator, elevator, basket or other device for moving passengers or freight; (*appareil de levage*)
- "emergency first aid certificate" means the certificate issued by an approved organization for the successful completion of a first aid course of at least one day's duration; (*certificat de secourisme d'urgence*)
- "environmental conditions" means meteorological, oceanographical and other natural conditions, including ice conditions, that may affect the operations of a work place; (*conditions environnementales*)
- "field accommodation" means living, eating or sleeping quarters provided by an employer for the accommodation of employees at a work place; (*logement sur place*)
- "fire hazard area" means an area that contains or is likely to contain explosive or flammable concentrations of a hazardous substance; (*endroit présentant un risque d'incendie*)
- "first aid attendant" means a medic or a qualified person who is a holder of an emergency first aid certificate, a standard first aid certificate, a mariners first aid certificate or an advanced first aid certificate or of a registered nurse's certificate recognized under the laws of a province; (*secouriste*)

"first aid room" means a room used exclusively for first aid or medical

purposes; (salle de premiers soins)

"high voltage" means a voltage of more than 750 V between any two conductors or between a conductor and ground; (*haute tension*)

"hot work" means welding, burning, rivetting, drilling, grinding, chipping or any other work where a flame is used or sparks are produced; (*travail à chaud*)

"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*)

"mariners first aid certificate" means the certificate issued by an approved organization for the successful completion of a mariners' first aid course of at least five days' duration; (*certificat de secourisme maritime*)

"medic" means a qualified person who

(a) has experience with helicopter or fixed-wing aircraft evacuation for medical purposes,

(*b*) is the holder of an advanced cardiac life support certificate or basic cardiac life support instructor's certificate recognized by the Canadian Heart Foundation, and

(c) is the holder of

(i) a registered nurse's certificate recognized under the laws of a province and has clinical experience in intensive care or emergency practice,

(ii) a paramedic certificate issued by a college in a province and has clinical experience, or

(iii) an Occupational Qualification VIB Medical Assistant Canadian military certificate; (*technicien médical*)

"medical practitioner" [Repealed, SOR/88-199, s. 1]

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

"National Building Code" means the *National Building Code of Canada, 1985*, issued by the Associate Committee on the National Building Code, National Research Council of Canada, dated 1985, as amended to January 1987; (*Code national du bâtiment*)

"National Fire Code" means the *National Fire Code of Canada, 1985*, issued by the Associate Committee on the National Fire Code, National Research Council of Canada, dated 1985, as amended to January 1987; (*Code national de prévention des incendies*)

"offshore" means, with respect to a work place, a location within a watercovered area that is not an island, an artificial island or an ice platform; (*au large des côtes*)

"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*)

"production facility" means production, separating, treating and processing equipment and facilities necessary in production operations, including airstrips, helicopter landing areas and field accommodation; (*installation de*

production)

- "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 Canada Oil and Gas Lands Administration, formed under the Department of Energy, Mines and Resources and the Department of Indian Affairs and Northern Development, for the administrative region of that Administration in which the work place is situated; (*bureau régional*)
- "standard first aid certificate" means the certificate issued by an approved organization for successful completion of a first aid course of at least two days' duration; (*certificat de secourisme général*)
- "support craft" means a vehicle, vessel, tug, ship, aircraft, air cushion vehicle, standby craft or other craft used to provide transport for or assistance to employees in a work place; (*véhicule de service*)
- "toilet room" means a room that contains a water closet or a urinal, but does not include an outdoor privy; (*cabinet de toilette*)
- "ULC Standard" means the Underwriters' Laboratories of Canada Standard CAN4-S508-M83, *Rating and Fire Testing of Fire Extinguishers*, dated June 1983, as amended to July 1986. (*norme ULC*) SOR/88-199, ss. 1, 19; SOR/94-165, s. 3.

Prescription

1.2 These Regulations are prescribed for the purposes of sections 125, 125.1, 125.2 and 126 of the Act. SOR/88-199, s. 2; SOR/94-165, s. 4.

Application

<u>1.3 (1)</u> Subject to subsection (3), these Regulations, other than Part II, apply in respect of employees employed on or in connection with exploration or drilling for or the production, conservation, processing or transportation, other than transportation through an interprovincial pipeline, of oil or gas in Canada lands, as defined in the *Canada Oil and Gas Act*.

(2) Subject to subsection (3), Part II applies in respect of employees employed in Canada lands, as defined in the *Canada Oil and Gas Act*, on or in connection with the transportation of oil or gas through an interprovincial pipeline.

(3) These Regulations do not apply in respect of employees employed in the operation of ships or aircraft.

Records and Reports

1.4 Where an employer is required to keep and maintain a record, report or other document referred to in section 125 or 125.1 of the Act, 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/88-199, s. 3; SOR/94-165, s. 5.

Inconsistent Provisions

<u>1.5</u> 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 of these Regulations shall prevail to the extent of the inconsistency.

<u>**1.6**</u> 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 October 30, 1987.

PART II

INTERPROVINCIAL PIPELINES

<u>2.1</u> The Canada Occupational Safety and Health Regulations apply in respect of employees employed in Canada lands, as defined in the Canada Oil and Gas Act, on or in connection with the transportation of oil or gas through an interprovincial pipeline. SOR/94-165, s. 6(F).

PART III BUILDING SAFETY

Standards

<u>3.1</u> The design and construction of every building on shore shall meet the standards set out in Parts 3 to 9 of the National Building Code so far as is reasonably practicable. SOR/94-165, s. 7(F).

Doors

<u>3.2</u> Every double action swinging door that is located in an exit, entrance or passageway used for two-way pedestrian traffic shall be designed and fitted in a manner that will permit persons who are approaching from one side of the door to be aware of persons who are on the other side of the door.

Floor and Wall Openings

3.3 (1) In this section,

"floor opening" means an opening measuring 300 mm or more in its smallest dimension in a floor, platform, pavement or yard; (*ouverture dans un plancher*)

"wall opening" means an opening at least 750 mm high and 300 mm wide in a wall or partition. (*ouverture dans un mur*)

(2) 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, guardrails shall be fitted around the wall opening or floor opening or the opening shall be covered with material capable of supporting all loads that may be imposed on it.

(3) The material referred to in subsection (2) shall be securely fastened to a supporting structural member of the building.

(4) Subsection (2) does not apply to the loading and unloading areas of truck, railroad and marine docks.

(5) Subject to section 3.10, guardrails shall be installed around the perimeter of every work place, other than a helicopter deck, where there is a drop of more than 1 m from the work place to an adjacent area.

Open Top Bins, Hoppers, Vats and Pits

<u>3.4 (1)</u> 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 fitted with a fixed ladder on the inside wall of the enclosure and 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 guardrails.

(2) A grating, screen, covering or walkway referred to in subsection (1) shall be so designed, constructed and maintained that it will support a load that is not less than

(a) the maximum load that is likely to be imposed on it, or

(b) a live load of 6 kPa,

whichever is the greater. SOR/94-165, s. 8(E).

Ladders, Stairways and Ramps

<u>3.5</u> Where an employee in the course of employment is required to move from one level to another level that is more than 450 mm higher or lower than the former level, the employer shall install a fixed ladder, stairway or ramp between the levels.

<u>3.6</u> 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

(a) where practicable, install a barricade that will protect employees using the stairway from the hazard; or

(*b*) where it is not reasonably practicable to install a barricade, post a sign at that end of the stairway to warn employees of the hazard.

<u>3.7 (1)</u> Subject to subsection (5), a fixed ladder that is more than 6 m in length shall, where practicable, be fitted with a protective cage for that portion of its length that is more than 2 m above the base level of the ladder.

(2) Subject to subsection (5), a fixed ladder that is more than 9 m in length shall have, at intervals of not more than 6 m, a landing or platform that

(a) is not less than 0.36 m² in area; and

(b) is fitted at its outer edges with a guardrail.

(3) A fixed ladder, cage, landing or platform referred to in subsection (1) or (2) shall be designed and constructed to withstand all loads that may be imposed on it.

(4) A fixed ladder shall be

(a) vertical;

(b) securely held in place at the top, bottom and at intermediate points; and

(c) fitted with

(i) rungs that are at least 150 mm from the wall and uniformly spaced at

intervals not exceeding 300 mm, and

(ii) side rails that extend not less than 900 mm above the landing or platform.

(5) Subsections (1) and (2) do not apply to a fixed ladder that is used with a fall protection system referred to in section 13.10 of Part XIII.

Docks, Ramps and Dock Plates

3.8 (1) Every loading and unloading dock and ramp shall be

(a) of sufficient strength to support the maximum load that is likely to be imposed 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) 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 imposed on it. SOR/94-165, s. 9(E).

Guardrails

3.9 (1) Every guardrail shall consist of

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

(b) a horizontal intermediate rail or line spaced midway between the top rail or line and the base of the guardrail; and

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

(2) Every guardrail shall be designed to withstand the greater of

(a) the maximum load that is likely to be imposed on it; and

(*b*) a static load of not less than 890 N applied in any direction at any point on the top rail or line. SOR/94-165, s. 10(E).

<u>3.10</u> Where it is not practicable to install guardrails as required by subsection 3.3(5) or subsection 4.8(1) or paragraph 4.11(2)(c) of Part IV, cables or chains shall be installed in a manner that will prevent employees from falling from the work place.

Toe Boards

<u>3.11 (1)</u> Subject to subsection (2), where there is a hazard that tools or other objects may fall from a platform or other raised area onto an employee, the employer shall, where practicable, install

(a) a toe board that

(i) extends above the floor of the platform or other raised area, and

(ii) will prevent tools or other objects from falling from the platform or other raised area; or

(*b*) where the tools or other objects are piled to such a height that a toe board will not prevent the tools or other objects from falling, a solid or mesh panel that extends from the floor of the platform or other raised area to a height of not less than 450 mm.

(2) Where the installation of a toe board is not practicable on a platform or other raised area, all tools or other objects that could fall shall be

(a) tied in a manner that, if they fall, employees beneath the platform will be protected; or

(*b*) placed in such a way that, if they fall, they will be caught by a safety net positioned so as to protect from injury any employee on or below the platform or other raised area. SOR/94-165, s. 11.

Housekeeping and Maintenance

<u>3.12 (1)</u> Every stairway, walkway, ramp and passageway used by employees shall, as far as is practicable, be kept free of accumulations of ice and snow.

(2) All dust, dirt, waste and scrap material in a work place 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 compromised.

(3) Every travelled surface in a work place shall be maintained free from splinters, holes, loose boards and tiles or similar defects. SOR/94-165, s. 12 (F).

<u>3.13 (1)</u> Where a floor in a work place is normally wet and employees in the work place do not use non-slip footwear, the floor shall be covered with a dry false floor or platform or treated with a non-slip material or substance.

(2) The floor in a work place shall, as far as is practicable, be kept free from oil, grease or any other slippery substance. SOR/94-165, s. 13.

Temporary Heat

<u>**3.14** (1)</u> Subject to subsection (2), where a salamander or other portable open-flame heating device is used in an enclosed work place, the heating device shall not restrict a means of exit and shall be

(a) so located, protected and used that there is no hazard of igniting combustible materials adjacent to the heating device;

(*b*) used only when there is ventilation provided that protects the safety and health of employees; and

(c) so located as to be protected from damage or overturning.

(2) Where the heating device referred to in subsection (1) does not provide complete combustion of the fuel used in connection with it, the heating device shall be equipped with a securely supported sheet metal pipe that discharges the products of combustion outside the enclosed work place.

(3) A portable fire extinguisher that has not less than a 10B rating as defined in the ULC Standard shall be readily accessible from the location of the heating

device referred to in subsection (1) when the device is in use. SOR/94-165, s. 14.

PART IV TEMPORARY STRUCTURES AND EXCAVATIONS

Interpretation

<u>4.1</u> In this Part, "stage" means a working platform supported from above. (*plate-forme suspendue*)

Application

4.2 This Part applies to fixed and portable ladders, to stages and scaffolds and to temporary ramps and stairs. SOR/94-165, s. 15(E).

General

<u>4.3</u> No employee shall work on a temporary structure in environmental conditions that are 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.

<u>4.4</u> 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.

4.5 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.

4.6 (1) Before a temporary structure is used by an employee, a qualified person shall make a visual safety inspection of it.

(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

4.7 Where a vehicle or a pedestrian may come into contact with a temporary structure, a person shall be positioned at the base of the temporary structure or a barricade shall be installed around it to prevent any such contact.

Guardrails and Toe Boards

4.8 (1) Subject to section 3.10 of Part III, at every open edge of a platform of a temporary structure guardrails shall be installed and, subject to subsection 3.11(2) of Part III, where there is a likelihood that persons beneath the platform may be injured by objects falling from the platform, toe boards shall be installed.

(2) The guardrails and toe boards referred to in subsection (1) shall meet the standards set out in section 3.9 and subsection 3.11(1) of Part III.

Temporary Stairs, Ramps and Platforms

4.9 (1) Subject to subsection 4.10(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.

Scaffolds

<u>4.10(1)</u> The erection, use, dismantling or removal of a scaffold shall be carried out by or under the supervision of a qualified person.

(2) Where a scaffold is erected on an uneven surface, it shall be provided with base plates that maintain its stability.

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

(4) Every scaffold shall

(a) have a platform that is at least 500 mm wide and securely fastened in place;

(b) have a working surface that is even and horizontal; and

(c) be fitted with guardrails except on the side where the work to be performed would be hindered by the guardrail.

(5) 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.

Stages

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

(2) Every stage shall

(a) have a working surface that is even and horizontal and is capable of supporting any load that is likely to be imposed on it;

(*b*) be fitted with an effective means of holding the stage away from the working area; and

(c) subject to section 3.10 of Part III, where the stage is to be used at a height of more than 3 m, be fitted with guardrails.

(3) The supporting structure and the ropes or tackle supporting a stage shall have a safety factor of not less than six.

Ladders

4.12 (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 fixed and 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) Every fixed or portable ladder shall be positioned in such a manner that it is not necessary for a person to use the underside of the ladder.

(4) Where a fixed or portable ladder provides access from one level to another

(a) the ladder shall extend, where practicable, at least three rungs above the higher level; or

(b) where it is not practicable to comply with paragraph (a), handholds shall be provided.

(5) No metal or wire-bound fixed or portable ladder shall be used where there is a hazard that it 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 step ladder.

(7) No non-metallic fixed or portable ladder shall be coated with a material that may hide flaws.

Excavation

<u>4.13(1)</u> Before the commencement of work on an excavation, trench or tunnel or the creation of an opening in a bulkhead, deck or similar structure, the employer shall mark the location of all pipes, cables and conduits in the area where the work is to be done.

(2) Where an excavation, trench or opening constitutes a hazard to employees, a barricade shall be installed around it.

(3) Where an employee is required to enter an excavation or trench that is more than 1.4 m deep and the sides of which are sloped at an angle of 45° or more to the horizontal, or a tunnel,

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

(b) the roof of the tunnel

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

Safety Nets

<u>4.14 (1)</u> 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

<u>4.15</u> Every platform, hand-rail, guardrail and work area on a temporary structure used by an employee shall, as far as is practicable, be kept free of accumulations of ice and snow while the temporary structure is in use.

4.16 The working surface of a temporary structure used by an employee shall, where practicable, be kept free of grease, oil or other slippery substance and of any material or object that may cause an employee to slip or trip.

PART V ELEVATING DEVICES

Standards

 $\underline{\textbf{5.1}\ (1)}$ 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), 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 CAN/CSA----B44-M90, *Safety Code for Elevators*, the English version of which is dated May 1990 and the French version of which is dated December 1990, other than clause 9.1.4;

(*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/94-165, s. 16.

Personnel Transfer Baskets

5.2 (1) No basket shall be used to transfer freight except in an emergency.

(2) Every transfer of a person by a basket shall be made only when visibility and environmental conditions are such that the transfer can be made safely.

(3) Where a person is transferred by a basket to or from a place on a ship or to or from a place on a drilling unit or an offshore production facility,

(a) persons at both places shall be in direct radio contact; and

(b) the person to be transferred shall

(i) be instructed in the safety procedures to be followed by him, and

(ii) shall use a life jacket or a personal flotation device.

(4) Where a person is transferred by a basket to or from a drilling unit or an offshore production facility, the drilling unit or production facility shall be equipped with at least two buoyant baskets.

(5) Every basket shall be in serviceable condition and all ropes, wires or other vital parts of a basket that show signs of significant wear shall be replaced before the basket is used.

(6) The number of persons transferred in a basket shall not exceed the number of persons the basket was designed to carry safely.

(7) The raising or lowering of a basket shall, as far as is practicable, be carried out over water.

Use and Operation

5.3 No elevating device shall be used or operated

(a) with a load in excess of the load that it was designed and installed to move safely; or

(*b*) where the elevating device is installed on a floating drilling unit or a floating production facility, when the roll of the drilling unit or the production facility exceeds the maximum roll recommended by the manufacturer for the safe operation of the elevating device.

5.4 (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

5.5 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 or the safety device attached thereto is placed in service;

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

(c) once every 12 months.

5.6 (1) A record of each inspection and test made in accordance with section 5.5 shall

(a) be signed by the qualified 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 qualified 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 kept by the employer for five years after the date on which it is signed.

Repair and Maintenance

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

PART VI BOILERS AND PRESSURE VESSELS

Interpretation

6.1 In this Part,

"inspector" means a qualified person recognized under the laws of Canada or of a province as qualified to inspect boilers, pressure vessels or piping systems; (*inspecteur*)

"maximum allowable working pressure" means the maximum allowable working pressure set out in the record referred to in section 6.12; (*pression de fonctionnement maximale autorisée*)

"maximum temperature" means the maximum temperature set out in the record referred to in section 6.12; (*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/94-165, s. 17(F).

Application

6.2 This Part does not apply to

(a) a heating boiler that has a heating surface of 3 m² 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; or

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

Construction, Testing and Installation

<u>6.3</u> Every boiler, pressure vessel and piping system used in a work place shall be constructed, tested and installed by a qualified person.

Use, Operation, Repair, Alteration and Maintenance

<u>6.4 (1)</u> No person shall use a boiler, pressure vessel or piping system unless it has been inspected by an inspector in accordance with subsection (2).

(2) Every boiler, pressure vessel and piping system shall be inspected in accordance with sections 6.8 to 6.10

(a) after installation; and

(*b*) after any welding, alteration or repair is carried out on it. SOR/94-165, s. 18.

<u>6.5</u> Every boiler, pressure vessel and piping system in use at a work place shall be operated, maintained and repaired by a qualified person.

<u>6.6</u> No person shall alter, interfere with or render inoperative any fitting attached to a boiler, pressure vessel or piping system except for the purpose of adjusting or testing the fitting.

Buried Pressure Vessels

<u>6.7</u> Notice of a proposed backfilling over a buried pressure vessel shall be given to the regional safety officer before the backfilling is begun.

Inspections

6.8 (1) Subject to section 6.9, every boiler, pressure vessel and piping system in use in a work place shall be inspected

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

(b) internally, at least once every five years.

(2) Paragraph (1)(*a*) does not apply to a pressure vessel that is buried.

6.9 (1) Where a pressure vessel is used to store anhydrous ammonia, a hydrostatic test at a pressure equal to one and one-half times the maximum allowable working pressure shall be conducted at least once every five years.

(2) The integrity of a pressure vessel that is a part of a motion compensator system or blowout preventer shall be verified at least once every five years by

(a) where practicable, an internal inspection; or

(b) where an internal inspection is not practicable, by a hydrostatic test or other non-destructive test method.

<u>6.10 (1)</u> Where more than five years have elapsed since the date of the last test and inspection of a Halon container, the container shall not be recharged without a test of container strength and a complete visual inspection being carried out.

(2) A Halon container that has been continuously in service without being discharged may be retained in service for a maximum of 20 years after the date of the last test and inspection, at which time it shall be emptied, subjected to a test of container strength and a complete visual inspection and re-marked before being placed back in service.

(3) Where a Halon container has been subjected to unusual corrosion, shock or vibration, a complete visual inspection and a test of container strength shall be carried out. SOR/94-165, s. 19.

<u>6.11</u> In addition to the requirements of sections 6.8 to 6.10, every boiler, pressure vessel and piping system in use at 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.

Records

<u>6.12 (1)</u> A record of each inspection carried out under sections 6.4 and 6.8 to 6.11 shall be completed by the inspector or qualified person who carried out the inspection.

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

(a) shall be signed by the inspector or qualified 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 inspector or qualified person who carried out the inspection, the boiler, pressure vessel or piping system is safe for its intended use,

(vi) where appropriate in the opinion of the inspector or qualified person who carried out the inspection, recommendations regarding the need for more frequent inspections or tests than are required by section 6.8, 6.9 or 6.10, and

(vii) any other observation that the inspector or qualified person who carried out considers relevant to the safety of employees.

(3) The employer shall keep every record referred to in subsection (1) for one year after the date that the next inspection is required by this Part.

PART VII LEVELS OF LIGHTING

Application

7.1 This Part does not apply to the bridge of a drilling unit or floating production facility.

General

<u>7.2 (1)</u> The levels of lighting prescribed in this Part shall, where reasonably practicable, be provided by a lighting system installed by the employer.

(2) Where it is not reasonably practicable to comply with subsection (1), the employer shall provide portable lighting that gives the prescribed levels of lighting. SOR/94-165, s. 20(F).

Measurement of Average Levels of Lighting

7.3 For the purposes of this Part, the average level of lighting at a work position or in an area shall be determined by making four or more measurements at different places at the work position or in the area

(a) where work is performed at a level higher than the floor, at the level at which the work is performed, and

(b) in any other case, 1 m above the floor,

and dividing the aggregate of the results of the measurements by the number of the measurements.

Minimum Average Levels of Lighting

<u>7.4</u> The average level of lighting at a work position or in an area referred to in Column I of an item of the Schedule to this Part shall be not less than the average level set out in Column II of that item.

Emergency Lighting Systems

<u>7.5 (1)</u> Where a failure in the lighting system in an area through which an employee passes in carrying out emergency procedures referred to in subsection 18.9(1) will cause the level of lighting to be reduced to less than 3 dalx, an emergency lighting system shall be installed in the area.

(2) The emergency lighting system referred to in subsection (1) shall

(a) operate automatically in the event of a failure of the lighting system; and

(b) provide an average level of lighting of 3 dalx.

Minimum Levels of Lighting

<u>7.6</u> The level of lighting at any place at a work position or in an area shall be not less than one-third of the average level of lighting prescribed by this Part for the work position or area.

SCHEDULE (Section 7.4) AVERAGE LEVELS OF LIGHTING

Column I Item Work Position or Area	Column II Average Level in Dalx	
		·
1. OFFICE WORK		
(a) Work positions at which very difficult visual task	n cartography, drafting, plan reading or other is are performed	80
(b) Work positions at which continuous reading or w	n business machines are operated or writing visual tasks are performed	50
(c) Other areas		5
2. LABORATORIES		
(a) Work positions at which are handled and where hazardous to the safety	n instruments are read or hazardous substances errors in such reading or handling may be y or health of an employee	
(<i>b</i>) Work positions at which laboratory work	n close or prolonged attention is given to	80 50
(c) Other areas		5
3. WORKSHOPS AND GAI	RAGES	
(a) Work positions at which is performed	n fine or medium bench, machine or repair work	50
(b) Work positions at which performed	ו rough bench, machine or repair work is	30
(c) Other areas		5
4. PROCESS AREAS		
 (a) Work positions in major which tasks essential to hazardous to the safety 	r control rooms or rooms with dial displays at the control of equipment or machinery of employees are performed	
		80
(b) Work positions at which handled	h a hazardous substance is used, stored or	50
(c) Work positions at which illuminating are	n gauges and meters that are not self-	5
(<i>d</i>) Other areas		2
5. LOADING PLATFORMS	AND WAREHOUSES	
(a) Work positions at which	n packages or goods are checked or sorted	15
(b) Work positions at which performed	n loading or unloading work is frequently	10

6. STORAGE AREAS	
(a) Areas in which there is a high level of activity	
(b) Other areas 2	
7. DERRICKS, DRILL FLOORS AND MOON POOLS	
(a) Work positions at which there is a high level of activity	
(<i>b</i>) Other areas 2	
8. ENTRANCES, EXITS, ELEVATORS, CORRIDORS, AISLES AND STAIRWAYS	
(a) Areas in which there is a high level of activity or where there is a high frequency of traffic	10
(b) Areas in which there is a moderate level of activity or where there is a moderate frequency of traffic	10
9. FIRST AID ROOMS	5
(a) Work positions at which first aid is rendered or examinations are conducted or at which tasks essential to the safety or health of an employee are performed	80
(b) Other areas	20
10. FOOD PREPARATION AREAS	
 (a) Work positions at which prolonged cutting or preparation tasks are performed (b) Other areas 	80 20
11. DINING AREAS AND RECREATION SPACES	
(a) Areas used for serving food, for eating or for recreational activities 20	
(b) Other areas 10	
12. PERSONAL SERVICE ROOMS 13. BOILER, ENGINE, BALLAST CONTROL AND GENERATOR ROOMS	20 5 20
14. ROOMS IN WHICH PRINCIPAL HEATING, VENTILATION OR AIR CONDITIONING EQUIPMENT IS INSTALLED	7
15. EMERGENCY SHOWER FACILITIES, EMERGENCY EQUIPMENT LOCATIONS AND EMERGENCY EVACUATION AREAS	5

SOR/88-199, s. 19.

PART VIII

Interpretation

8.1 In this Part, "sound level meter" means an instrument for measuring levels of sound and impulse sound that meets the standards set out in ANSI Standard ANSI SI.4-1983, *Specification for Sound Level Meters*, dated February 17, 1983, and is referred to in that Standard as type 0, 1 or 2. (*sonomètre*)

Levels of Sound

<u>8.2 (1)</u> Subject to subsections (2) and (3) and sections 8.3 and 8.4, the level of sound in a work place shall be less than 85 dB.

(2) Where it is not reasonably practicable for an employer to maintain the level of sound in a work place at less than 85 dB, no employee shall be exposed in any 24 hour period to

(*a*) a level of sound referred to in Column I of an item of the schedule to this Part for a number of hours exceeding the number set out in Column II of that item; or

(*b*) a number of different levels of sound referred to in Column I of an item of the schedule to this Part, where the sum of the following quotients exceeds 1:

(i) the number of hours of exposure to each level of sound

divided by

(ii) the maximum number of hours of exposure per 24-hour period set out in Column II of that item.

(3) Where it is not reasonably practicable for an employer to maintain the exposure of an employee to a level of sound at or below the levels referred to in subsection (1) or (2), the employer shall

(a) make a report in writing to the regional safety officer at the regional office setting out the reasons why the exposure cannot be so maintained; and

(b) provide every employee entering the work place with a hearing protector that

(i) meets the standards set out in CSA Standard Z94.2-M1984, *Hearing Protectors*, the English version of which is dated June 1984 and the French version of which is dated February 1985, and

(ii) reduces the level of sound reaching the employee's ears to less than 85 dB. SOR/94-165, s. 21.

8.3 No employee shall be exposed in sleeping quarters to a level of sound of more than 75 dB.

<u>8.4</u> Where the level of impulse sound in a work place exceeds 140 dB, the employer shall provide every employee entering the work place with a hearing protector that

(*a*) meets the standards set out in CSA Standard Z94.2-M1984, *Hearing Protectors*, the English version of which is dated June 1984 and the French version of which is dated February 1985; and

(b) reduces the peak level of impulse sound reaching the employee's ears

to 140 dB or less.

Sound Level Measurement

<u>8.5</u> The levels of sound referred to in sections 8.2 and 8.3 shall be measured by using the slow exponential-time-averaging characteristic and the A-weighting characteristic of a sound level meter.

<u>8.6</u> The level of impulse sound referred to in section 8.4 shall be measured by using the impulse exponential-time-averaging characteristic of a sound level meter.

Warning Signs

8.7 In a work place where the level of sound is 85 dB or more or where the peak level of impulse sound exceeds 140 dB, the employer shall post signs warning persons entering the work place

(a) that there is a hazardous level of sound or impulse sound in the work place;

(*b*) if applicable, of the maximum number of hours of exposure determined under subsection 8.2(2); and

(*c*) if applicable, of the requirement to wear a hearing protector. SOR/94-165, s. 22(F).

SCHEDULE (Subsection 8.2(2)) MAXIMUM EXPOSURE TO LEVELS OF SOUND AT WORK PLACE

Column I Item		Column II Maximum Number of Hours of Exposure per Employee per 24 hour period		
	Levels of Sound in dB			
1. 85 or more but not more than 90			8	
2. more than 90 but not more than 92			6	
3. more than 92 but not more than 95			4	
4. more than 95 but not more than 97			3	
5. more than 97 but not more than 100			2	
6. r	nore than 100 but	not more than 102	1.5	
7. r	nore than 102 but	not more than 105	1	
8. r	nore than 105 but	not more than 110	0.5	
9. r	nore than 110 but	not more than 115	0.25	
10. r	nore than 115		0	

PART IX ELECTRICAL SAFETY

Interpretation

<u>9.1</u> In this Part, "control device" means a device that will safely disconnect electrical equipment from its source of energy. (*dispositif de commande*)

Safety Procedures

9.2 (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 there is a likelihood that the qualified person or the employee referred to in subsection (1) may receive a hazardous electrical shock during the performance of testing or work,

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

(*b*) the employee shall be instructed and trained in the use of the insulated protection equipment and tools.

9.3(1) Where electrical equipment is live or may become live, no employee shall work on the equipment unless

(a) the employer has instructed the employee in procedures that are safe for work on live conductors;

(b) a safety ground is connected to the equipment; or

(c) the equipment is isolated in accordance with section 9.10.

(2) Subject to subsections (3) and (4), where an employee is working on or near electrical equipment that is live or may become live, the electrical equipment shall be guarded.

(3) Subject to subsection (4), where it is not practicable for electrical equipment referred to in subsection (2) 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.

(4) Where live electrical equipment is not guarded or insulated in accordance with subsection (2) or (3) or where the employee referred to in subsection (3) is not insulated from ground, no employee shall work so near to any live part of the electrical equipment that is within a voltage range set out 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.

(5) No employee shall work near a live part of any electrical equipment referred to in subsection (4) where there is a hazard that an unintentional movement by the employee would bring any part of his body or any thing with which he is in contact closer to that live part than the distance referred to in that subsection.

9.4 No employee shall work on or near high voltage electrical equipment

unless he is authorized to do so by his employer.

9.5 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 or a symbol conveying the same meaning shall be posted in a conspicuous place at every approach to live high voltage electrical equipment.

Safety Watcher

<u>9.6 (1)</u> 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

9.7 Where an employee is working on or in connection with electrical equipment, the 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

9.8 (1) Before an employee climbs a pole or elevated structure that is embedded in the ground and 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 the supports. SOR/94-165, s. 23(F).

<u>9.9</u> Every pole or elevated structure referred to in subsection 9.8(1) shall meet the standards set out in

(a) CSA Standard CAN3-015-M83, *Wood Utility Poles and Reinforcing Studs*, the English version of which is dated January 1983 and the French

version of which is dated December 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/94-165, s. 24.

Isolation of Electrical Equipment

9.10 (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
- (a) state the isolation procedures to be followed;
- (b) identify the electrical equipment to which the instructions apply;
- (c) describe any tests to be performed;
- (d) specify particulars of the tags or signs to be used; and
- (e) specify the protection equipment to be used.
- (3) A tag or sign referred to in paragraph (2)(d) 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 at which the electrical equipment was isolated;
- (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 to notify persons that the operation or movement of the electrical equipment is prohibited during the performance of the work or live test.

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

(5) The instructions referred to in subsection (1) shall be kept readily available for examination by employees at the work place in which the electrical equipment is located. SOR/94-165, s. 25.

Control Devices, Switches, Cords and Cables

<u>9.11 (1)</u> 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 control 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 control device shall be fitted with a locking device that only such an authorized person can activate. (4) Control switches for all electrically operated machinery shall be clearly marked to indicate the switch positions that correspond to the electrical circuits being controlled.

9.12 (1) All electrical equipment within a Class 1 Division 1 area or Class 1 Division 2 area as defined in the Canadian Electrical Code shall be constructed in a manner suitable for the environmental conditions in the area in which the equipment is used.

(2) Each extension cord of electrical equipment referred to in subsection (1) shall be equipped with a terminal that provides an interruption of the circuit before a connecting device is withdrawn.

Defective Electrical Equipment

9.13 Defective electrical equipment that is likely to be hazardous to the safety or health of an employee shall be disconnected from its power source by a means other than the control switch and notices shall be placed on the equipment and at the control switch to indicate that the equipment is defective. SOR/94-165, s. 26(F).

Electrical Fuses

<u>9.14 (1)</u> Electrical fuses shall be of the correct ampere rating and fault capacity rating for the circuit in which they are installed.

(2) No employee shall replace missing or burnt-out fuses unless authorized to so do by a qualified person.

Power Supply Cables

<u>9.15 (1)</u> Power supply cables for portable electrical equipment shall be placed clear of areas used for vehicles unless the cables are protected by guards.

(2) A three-wire power supply cable on electrical equipment or on an electrical appliance shall not be altered or changed for the purpose of using the equipment or appliance on a two-wire power supply.

Grounded Electrical Equipment

<u>9.16</u> Grounded electrical equipment and appliances shall be used only when connected to a matching electrical outlet receptacle.

SCHEDULE

(Subsection 9.3(4)) DISTANCES FROM LIVE ELECTRICAL PARTS

Column I Column II Column III Voltage Range of Part: Distance Distance Item Part to Ground (V) in metres in metres ------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
[Next]

Important Notices