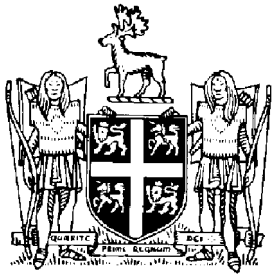

THE NEWFOUNDLAND AND LABRADOR GAZETTE

EXTRAORDINARY

PART II

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ST. JOHN'S, WEDNESDAY, DECEMBER 22, 2021

NEWFOUNDLAND AND LABRADOR REGULATION

NLR 79/21

NEWFOUNDLAND AND LABRADOR
REGULATION 79/21

Offshore Area Occupational Health and Safety Regulations
under the
Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act
(O.C. 2021-336)

(Filed December 22, 2021)

Under the authority of section 201.120 of the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act,* the Lieutenant-Governor in Council makes the following regulations.

Dated at St. John's, December 22, 2021.

Krista Quinlan
Clerk of the Executive Council

REGULATIONS

Analysis

Short title

1. These regulations may be cited as the *Offshore Area Occupational Health and Safety Regulations*.

PART I
GENERAL

Interpretation

2. (1) In these regulations

(a) "accommodation area" means the area of a marine installation or structure that contains the sleeping quarters, dining areas, food preparation areas, general recreation areas, office areas and medical rooms and includes all washrooms in that area;

(b) "Act" means the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act*;

(c) "advanced first aid certificate" means a certificate evidencing the holder's successful completion of a training program whose curriculum conforms to the curriculum for advanced first aid set out in CSA Group standard Z1210, "First aid training for the workplace – Curriculum and quality management for training agencies", or, in the case of marine crew on a vessel, whose curriculum conforms to Chapter 4 of the federal Department of Transport publication TP 13008, "Training Standards for Marine First Aid and Marine Medical Care";

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

(e) "ASME" means the American Society of Mechanical Engineers;

(f) "biological exposure index" means the biological exposure index established for a substance or agent by the American Conference of Governmental Industrial Hygienists in its publication "TLVs and BEIs: Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices";

(g) "competent person" means a person who, in respect of a task,

(i) has the knowledge, training and experience necessary to do the task in a manner that protects the health and safety of all persons at the workplace, and

(ii) has knowledge of the provisions of the Act, these regulations and the occupational health and safety program that apply to the task and of the potential or actual danger that the task poses to the health or safety of persons;

(h) "confined space" means an enclosed or partially enclosed space that

(i) is not designed or intended for human occupancy except on a temporary basis for the purpose of performing a specific task,

(ii) is or may become hazardous to a person in it, including by reason of its design, construction, location or atmosphere or the materials or substances it contains, without regard to any protection that may be afforded to the person through the use of personal protective equipment or additional ventilation, and

(iii) has restricted means of access and egress, or an internal configuration, that could make first aid, evacuation, rescue or other emergency response services difficult to provide;

(i) "de-energized" means, in respect of any equipment, machine, device or system, or any component of one of those things, that it is disconnected from all energy sources and void of any residual or stored energy;

(j) "dive project" means any work or activity for which an authorization to dive has been issued;

(k) "electrical equipment" means equipment that uses electricity or that is used for the generation or distribution of electricity;

(l) "energized" means, in respect of an electrical conductor, a circuit part or electrical equipment, that it is a source of voltage or is electrically connected to a source of voltage;

(m) "energy" includes electrical, mechanical, hydraulic, pneumatic, chemical, radiant, thermal and gravitational energy;

(n) "energy-isolating device" means a device that physically prevents the transmission or release of energy or a substance that is a source of energy, including

(i) a manually operated electrical circuit breaker,

(ii) a disconnect switch,

(iii) a manually operated switch by means of which the conductors of a circuit can be disconnected from all ungrounded supply conductors,

(iv) a valve, or

(v) a blind, blank or blocking seal;

(o) "environmental conditions" means meteorological, oceanographical and other natural conditions, including ice conditions, that may affect operations at a workplace;

(p) "first aider" means a person who holds a valid standard first aid certificate or advanced first aid certificate or who meets the requirements referred to in subsection 33(1) but is not a medic;

(q) "hazard information" means, in respect of a hazardous substance, information respecting the health and physical hazards posed by the substance and respecting its proper and safe storage, handling, use and disposal;

(r) "hazardous product" has the same meaning as in section 2 of the *Hazardous Products Act* (Canada);

(s) "high-pressure washing" means the use of water or another liquid delivered from a pump at a pressure exceeding 10

megapascals, with or without the addition of solid particles, to remove unwanted matter from a surface;

(t) "hot work" means any work or activity, other than the use of explosives, that involves the use of or is likely to produce fire, sparks or another source of ignition;

(u) "IMO Resolution MSC.81(70)" means the annex to International Maritime Organization Resolution MSC.81(70), "Revised Recommendation on Testing of Life-Saving Appliances";

(v) "lockout" means the securing, in accordance with the procedures referred to in paragraph 142(b), of a lockout device on an energy-isolating device that is being used to isolate the energy source of a piece of equipment, machine, device or system;

(w) "lockout device" means a device that prevents the manipulation or removal of an energy-isolating device;

(x) "LSA Code" means the annex to International Maritime Organization Resolution MSC.48(66), "International Life-Saving Appliance (LSA) Code";

(y) "materials handling equipment" means equipment, other than an elevator or personnel lift, that is used to transport, lift, move or position things or persons and includes gear and devices used in conjunction with other equipment in carrying out those functions;

(z) "medic" means a person designated under subsection 33(1);

(aa) "mobile equipment" means wheeled or tracked materials handling equipment that is engine-powered or motor-powered, together with any attached or towed equipment;

(bb) "occupational health and safety program" means the occupational health and safety program referred to in section 201.17 of the Act;

(cc) "piping system" means an assembly of pipes, pipe fittings, valves or other control or safety devices, pumps, compressors and other fixed equipment;

(dd) "professional engineer" means a competent person who is registered or licensed to engage in the practice of engineering under the laws of the province in which they practise;

(ee) "rated capacity" means the maximum load that equipment can handle or support safely, including, where applicable, in a given operational position or configuration, without regard to environmental conditions;

(ff) "safety data sheet" has the same meaning as in section 2 of the *Hazardous Products Act* (Canada);

(gg) "specialized dive physician" means a physician who is licensed to practise medicine in Canada and

(i) meets the competencies of a Level 3 Physician set out in CSA Group standard Z275.4, "Competency standard for diving, hyperbaric chamber, and remotely operated vehicle operations", or

(ii) possesses a diploma in hyperbaric medicine with a focus on diving medicine from the Royal College of Physicians and Surgeons of Canada and has completed training in saturation diving medicine that is recognized by that College;

(hh) "standard first aid certificate" means a certificate evidencing the holder's successful completion of a training program whose curriculum conforms to the curriculum for intermediate first aid set out in CSA Group standard Z1210, "First aid training for the workplace - Curriculum and quality management for training agencies" or, in the case of marine crew on a vessel, whose curriculum conforms to Chapter 3 of the federal Department of Transport publication TP 13008, "Training Standards for Marine First Aid and Marine Medical Care";

(ii) "threshold limit value" means the threshold limit value established for a substance or agent by the American Conference of Governmental Industrial Hygienists in its publication "TLVs and BEIs: Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices";

(jj) "work area" means the specific area in which an employee carries out their tasks; and

(kk) "work permit" means a permit referred to in section 53.

(2) In Part III.1 of the Act

(a) "diving operation" means any work or activity related to a dive, including any work or activity involving a diver or carried out by a person assisting a diver, that takes place from the start of pressurization or descent to the end of depressurization or ascent;

(b) "incident" means an event that resulted in any of the following occurrences or in which any of the following occurrences was narrowly avoided:

(i) death,

(ii) serious injury within the meaning of subsection 201.14(5) of the Act,

(iii) missing person,

(iv) fire or explosion,

(v) collision,

(vi) exposure to a hazardous substance in excess of the threshold limit value or biological exposure index for that substance,

(vii) impairment of any structure, facility, equipment or system critical to the safety of persons, or

(viii) implementation of emergency response procedures.

(3) In these regulations, any incorporation by reference of a document is an incorporation by reference of that document as amended from time to time.

(4) Notwithstanding subsection (3), if a document that is incorporated by reference is available in both official languages, any amendment to it is incorporated only when the amended version is available in both official languages.

Inconsistency or conflict

3. (1) In the event of an inconsistency or conflict among provisions of these regulations, including those that incorporate documents by reference, the provision that imposes the most stringent requirement applies.

(2) In the event of an inconsistency between an obligation imposed by these regulations and an obligation in respect of occupational health and safety that is imposed by the *Offshore Petroleum Installations Newfoundland and Labrador Regulations* or the *Offshore Petroleum Drilling and Production Newfoundland and Labrador Regulations, 2009*, these regulations prevail, regardless of whether the obligations are imposed on the same person.

PART II
OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT AND OVERSIGHT

Occupational health and safety policy

4. The occupational health and safety policy referred to in section 201.8 of the Act shall contain

(a) the commitment of the operator to cooperate with any committee or coordinator, as the case may be, with regard to health and safety; and

(b) an overview of the duties of all persons under Part III.1 of the Act.

Occupational health and safety management system

5. (1) The occupational health and safety management system referred to in section 201.12 of the Act shall set out procedures for

(a) setting goals for the improvement of workplace health and safety, identifying specific targets against which the attainment of those goals is to be measured and reviewing those goals and targets at least annually;

(b) ensuring that employees are

(i) competent persons in respect of all tasks to be carried out by them,

(ii) kept aware of activities and occurrences that may have an impact on their health or safety at the workplace, and

(iii) supervised to ensure that they perform their duties safely;

(c) ensuring that the most recent versions of all documents associated with the system are readily available to all persons at the workplace;

(d) collecting, managing and analyzing data with respect to occupational health and safety, including hazards, occupational disease, accidents, incidents and other hazardous occurrences, and identifying trends in that data; and

(e) keeping training and competency records in respect of employees, including workplace committee members.

(2) The audit referred to in paragraph 201.12(2)(g) of the Act shall be carried out at as soon as practicable after each of the following occurrences and, in any event, at least once every 3 years:

(a) any change of circumstances that may affect the health and safety of persons at the workplace;

(b) a health and safety officer provides to the operator a report under subsection 201.71(1) of the Act indicating non-compliance with Part III.1 of the Act; and

(c) the making by a health and safety officer of an order under section 201.89 or 201.90 of the Act in relation to the workplace.

(3) The operator shall implement any improvements identified during the audit referred to in paragraph 201.12(2)(g) of the Act as soon as practicable.

Occupational health and safety program and audit

6. (1) An occupational health and safety program shall

(a) set out procedures for ensuring that all employees at the workplace comply with the program and with Part III.1 of the Act and all regulations made under that Part;

(b) set out procedures for ensuring that employees are competent persons in respect of all tasks to be carried out by them and are kept aware of activities and occurrences that may have an impact on their health or safety at the workplace;

(c) set out procedures for keeping training and competency records in respect of employees;

(d) set out procedures for keeping records necessary for the auditing of the program;

(e) set out procedures and schedules that conform to paragraph 201.16(1)(p) of the Act for carrying out inspections for the purpose of hazard identification;

(f) prioritize the implementation of hazard control measures in the following order:

(i) measures that involve the elimination of hazards,

(ii) measures that involve the selection of less hazardous means of carrying out work and activities,

(iii) measures that involve the use of engineering controls to reduce the risks posed by hazards,

(iv) measures that involve the use of administrative controls to reduce the risks posed by hazards, and

(v) measures that involve protection from the effects of hazards;

(g) identify the persons responsible for implementing hazard control measures, including after an occupational disease, accident, incident or other hazardous occurrence;

(h) set out procedures for

(i) the reporting of hazards by persons at the workplace to the employer, and

(ii) the reporting, by the employer to a committee or to the coordinator, of hazards, occupational diseases, accidents, incidents, other hazardous occurrences and failures to comply with the provisions of Part III.1 of the Act, the regulations made under that Part or the occupational health and safety requirements of any authorization issued in relation to the workplace;

(i) set out procedures for the prompt investigation of occupational diseases, accidents, incidents and other hazardous occurrences to determine their root cause and identify any actions that are necessary to prevent their reoccurrence; and

(j) set out procedures for implementing corrective and preventive measures following an occupational disease, accident, incident or other hazardous occurrence and verifying the effectiveness of those measures.

(2) The audit referred to in paragraph 201.17(2)(h) of the Act shall be carried out at as soon as practicable after each of the following occurrences and, in any event, at least once every 3 years:

(a) any change of circumstances that may affect the health and safety of persons at the workplace;

(b) any change made by the operator to its management system;

(c) a health and safety officer provides to the employer a report under subsection 201.71(2) of the Act indicating non-compliance with Part III.1 of the Act; and

(d) the making by a health and safety officer of an order under section 201.89 or 201.90 of the Act in relation to the workplace.

(3) The employer shall implement any improvements identified during the audit referred to in paragraph 201.17(2)(h) of the Act as soon as practicable.

Workplace committee

7. (1) A workplace committee that establishes rules of procedure shall include among them

(a) the quorum required for committee meetings;

(b) the manner in which the committee will address complaints or concerns of employees, work refusals, occupational diseases, accidents, incidents and other hazardous occurrences that are reported to it;

(c) a rule whereby a complaint or concern raised with any committee member is to be considered a complaint or concern raised with the committee as a whole; and

(d) the time and manner in which complaints and concerns are to be responded to and recommendations made under paragraph 201.40(5)(d) of the Act.

(2) A workplace committee shall, for the purpose of paragraph 201.40(4)(d) of the Act, provide a copy of the minutes of its committee meetings to any employee on request.

Record keeping

8. All records that are required under the Act to be kept and maintained shall be kept and maintained in a manner that ensures their accessibility.

Posting of documents

9. (1) The period for which an operator or employer, as the case may be, shall ensure that a document is posted under paragraph 201.94(4)(a) of the Act is at least 45 days.

(2) Where a decision or order is appealed under subsection 201.97(1) of the Act, the operator or employer, as the case may be, shall ensure that all related documents referred to in paragraphs 201.94(1)(a) to (d) of the Act remain posted until the 45th day after the day on which the decision or order is revoked, confirmed or varied under subsection 201.97(6) of the Act.

PART III
REPORTING AND INVESTIGATION

Report to supervisor or employer

10. An employee who becomes aware of an occupational disease or an accident, incident or other hazardous occurrence at the workplace shall, without delay, report it to their supervisor or their employer, orally or in writing.

Report to employer with control

11. A supervisor to whom or employer to which, where that employer does not have control over the workplace, an occupational disease, accident, incident or other hazardous occurrence is reported under section 10 shall, without delay, report it to the employer with control over the workplace, orally or in writing.

Employer obligations

12. An employer that becomes aware of an occupational disease or an accident, incident or other hazardous occurrence at a workplace under its control shall, without delay,

(a) take all measures necessary to ensure the health and safety of all persons at the workplace; and

(b) provide to the operator, in writing, a brief description of the occupational disease, accident, incident or other hazardous occurrence, including the name of any affected persons and, where applicable, the date on which and the time and location at which it occurred.

Notification of chief safety officer

13. An operator that is required under subsection 201.14(1) of the Act to notify the chief safety officer of an occupational disease, accident, incident or other hazardous occurrence shall do so in writing.

Investigation

14. (1) An operator that is required, under subsection 201.14(2) of the Act, to investigate an occupational disease, accident, incident or other hazardous occurrence shall obtain, within 14 days after the day on which it becomes known to the operator, a report, prepared by a competent person and accompanied by supporting documentation, that sets out, in respect of the disease, accident, incident or other occurrence and to a level of detail that is proportional to its actual or potential severity,

(a) in the case of an accident, incident or other hazardous occurrence, the date on which and the time and location at which it occurred;

(b) the name of the affected employee, if any;

(c) a description of it and of any resulting symptoms or injury;

(d) a description of the treatment provided, if any;

(e) its causal factors and root causes;

(f) other information relevant to its nature or impact; and

(g) corrective and preventive measures that could be taken to prevent a similar situation from reoccurring.

(2) The operator shall submit a copy of the report and supporting documentation without delay to

(a) the workplace committee or the coordinator, as the case may be; and

(b) the chief safety officer.

(3) Where the operator becomes aware of new information that may result in a material change to the report, the operator shall obtain an updated report and supporting documentation and submit a copy without delay to the persons referred to in paragraphs (2)(a) and (b).

(4) For the purpose of subsection 201.14(2) of the Act,

(a) the records that an operator shall keep include all reports obtained under subsection (1) or (3) and their supporting documentation; and

(b) the period for which each record shall be retained is

(i) 40 years from the day on which it is made, where it relates to an occupational disease or exposure or potential exposure to a hazardous substance in excess of the threshold limit value or biological exposure index for that substance,

(ii) 10 years from the day on which it is made, where it relates to an incident other than the exposure or potential exposure referred to in subparagraph (i), or

(iii) 5 years from the day on which it is made, where it relates to any other accident or hazardous occurrence.

PART IV
TRAINING – GENERAL

Provision of general training

15. The training that an employer shall provide to each of its employees includes

(a) before the employee is first transported to a workplace and then as necessary to ensure the training remains valid for the duration of the employee's employment at the workplace,

(i) an offshore survival training program appropriate to the workplace location and to the means of transportation to be used to transport the employee to and from the workplace,

(ii) training on the legislation applicable to occupational health and safety, including the rights of employees and the duties of operators, employers, supervisors and employees, and

(iii) training on hydrogen sulfide safety, where hydrogen sulfide may be present at the workplace; and

(b) without delay on the employee's arrival at a workplace at which they have not been present in the previous 6 months and before they perform any work there,

(i) an orientation to the hazards and emergency procedures at the workplace,

(ii) training in respect of any emergency duties that may be assigned to them at the workplace, and

(iii) where the workplace is a marine installation or structure that is equipped with lifeboats, practice in boarding a lifeboat and securing themselves on a seat.

Competent person

16. An employer shall ensure that all instruction and training that it is required to provide under the Act is developed by and, where applicable, delivered by a competent person.

Records

17. An employer shall retain records of all instruction and training provided under the Act for

(a) at least 5 years after the day on which the person to whom the instruction or training is provided ceases to be employed at any of the employer's workplaces; or

(b) where the person to whom the instruction or training is provided is not an employee of the employer, at least 5 years after the instruction or training is provided.

PART V
EMERGENCY RESPONSE AND PREPAREDNESS

Emergency response plan

18. (1) An employer shall, for every workplace under its control that is a marine installation or structure and having regard to the risk assessment carried out by it for the purpose of the occupational health and safety program, develop, implement and maintain a written emergency response plan in preparation for any reasonably foreseeable emergency that might compromise the health and safety of persons at that workplace or at any other workplace under its control that is a workboat or dive site associated with the marine installation or structure.

(2) The emergency response plan shall

(a) indicate the maximum number of persons who can safely occupy the workplace;

(b) indicate the minimum number of persons needed at the workplace to be able to maintain safe operations in the event of an emergency;

(c) set out procedures for ensuring that the personnel on board list, which sets out the total number of persons at the workplace each day and the name, position, employer and, where applicable, cabin number of each, is kept up to date;

(d) set out the name and contact information of the operator, where the operator is not the employer with control over the workplace;

(e) provide for the establishment of emergency response teams;

(f) set out the name, position and contact information, including the usual location, of each person responsible for overseeing the emergency response teams and the implementation of emergency response procedures, as well as the name, position and contact information of those persons' delegates;

(g) set out the duties of employees, including members of the emergency response teams, and the procedures to be followed by all persons during an emergency;

(h) indicate the muster station or other location where each employee is required to report during an emergency;

(i) identify the system to be used for counting employees at each muster station and determining which employees, if any, are missing;

(j) include a description of all emergency alarm signals that may be used, including how the order to abandon is to be given;

(k) set out contact information for obtaining a means of transportation to be used to evacuate the workplace;

(l) identify and set out contact information for all emergency response entities, and other entities operating nearby, that could render assistance in the event of an emergency;

(m) include verified drawings of the layout of the workplace that clearly identify the person who verified them, indicate the scale of the drawings and show

(i) the location of all exits, fire escapes, stairways, elevators, corridors and other exit routes,

(ii) the location of all muster stations, temporary refuge areas, evacuation stations and other locations where lifeboats and life rafts are stored,

(iii) the location, quantity and type of all equipment that may be used or worn in implementing emergency response procedures,

(iv) the location of manual emergency shutdown and activation devices for all safety critical systems,

(v) the location, quantity and type of all emergency communications equipment,

(vi) the location of all first aid stations, medical rooms and casualty clearing areas, and

(vii) the location of all designated hazardous substance storage areas; and

(n) identify all resources necessary for the plan's implementation.

(3) The employer shall ensure that a copy of the emergency response plan is made readily available to all employees at the workplace.

(4) Where an employer has employees at a workplace not under its control, it shall ensure that those employees comply with

(a) the duties and procedures set out in the emergency response plan developed by the employer with control over the workplace; or

(b) emergency duties and procedures that the employer has ensured are aligned with those referred to in paragraph (a).

Posting of information

19. An employer shall ensure that the following items are posted in the specified locations, separately from the emergency response plan, at each workplace under its control that is a marine installation or structure:

(a) a station bill containing the information referred to in subsection 7(1) of the *Fire and Boat Drills Regulations* (Canada) as well as a description of any additional alarm signals, the membership of all emergency response teams and the location of all evacuation stations

(i) in conspicuous places on every deck, and

(ii) on the bridge, where the workplace is a vessel, or at the location where the installation manager referred to in section 189.2 of the Act is expected to be during an emergency, where the workplace is not a vessel;

(b) the personnel on board list referred to in paragraph 18(2)(c), at the applicable location referred to in subparagraph (a)(ii); and

(c) a drawing identifying all emergency escape routes from the location at which it is posted

(i) at conspicuous locations around the workplace, and

(ii) in every person's sleeping quarters.

Instruction and training

20. The instruction and training that an employer shall provide to each of its employees includes

(a) training in the procedures to be followed by the employee in the event of an emergency; and

(b) instruction on the location of any emergency and fire protection equipment that the employee may be reasonably expected to use and training in the use of that equipment.

Means of evacuation

21. An employer shall ensure, with respect to each workplace under its control that is a marine installation or structure, that

(a) all muster stations, escape routes, exits, stairways and any other means of evacuation are maintained in serviceable condition and, to the extent feasible, are accessible and ready for use at all times;

(b) all exits to the exterior, muster stations and evacuation stations are clearly identified by illuminated signs or otherwise clearly visible in all conditions; and

(c) all escape routes are clearly identified with light-reflecting or illuminated markings.

Emergency equipment

22. (1) An employer shall ensure that the location of all equipment to be used or worn in implementing emergency response procedures at each workplace under its control is clearly identified with light-reflecting or illuminated signs.

(2) An employer shall provide, in all sleeping quarters at a workplace under its control, a readily available grab bag for each person assigned to the sleeping quarters containing a smoke hood, heat-resistant gloves and a portable light source to enable the person to reach muster stations, temporary refuge areas and evacuation stations in conditions of fire, intense heat or smoke.

(3) An employer shall ensure that the emergency escape breathing devices or respirators that it provides in accordance with paragraph 46(a) are provided in appropriate quantities and at appropriate locations at the workplace to facilitate escape, having regard to

(a) the maximum number of persons who may be at the workplace;

(b) how those persons are generally distributed among various areas at the workplace; and

(c) the configuration of the workplace and the potential for a person's ability to move within it to be impeded by hazards arising from the situation that requires escape or from the escape itself.

(4) An employer shall ensure that the immersion suits that it provides in accordance with paragraph 46(b) are provided in appropriate quantities and sizes and at appropriate locations at the workplace to facilitate abandonment, having regard to

(a) the maximum number of persons who may be at the workplace;

(b) how those persons are generally distributed among various areas at the workplace;

(c) those persons' sizes; and

(d) the configuration of the workplace and the potential for a person's ability to move within it to be impeded by hazards arising from the situation that requires abandonment or from the abandonment itself.

(5) Notwithstanding subsection (4), the employer shall provide the following minimum number of immersion suits:

(a) in the case of a workplace that is a marine installation or structure used for drilling or production or as a living accommodation,

(i) where it is normally attended, 2 immersion suits for each person at the workplace, including one in the person's sleeping quarters, and

(ii) where it is normally unattended, one immersion suit for each person at the workplace;

(b) in the case of a workplace that is a marine installation or structure used for construction, diving or geotechnical or seismic work, one immersion suit for each person at the workplace, plus 2 additional suits in each of the bridge and the engine control room; and

(c) in the case of any other workplace, one immersion suit for each person at the workplace.

Emergency alert system

23. An employer shall ensure that each workplace under its control that is a marine installation or structure is equipped with a public address and alarm system that is audible or visible, as the case may be, in all areas of the workplace where a person may be present and is to be used to warn persons where

(a) the workplace has to be evacuated;

(b) a fire is detected;

(c) there is a malfunction of a mechanical ventilation system provided for an area where toxic or combustible gases may accumulate to hazardous levels;

(d) there is a person overboard; or

(e) there is any other threat to the health or safety of persons at the workplace.

Emergency power source

24. An employer shall ensure that each workplace under its control that is a marine installation or structure is equipped with an emergency power source that is sufficient to operate the following to the degree necessary to allow for safe occupancy of or egress from the workplace in the case of a failure of the main power system:

(a) the public address and alarm system;

(b) the emergency lighting system;

(c) internal and external communications systems; and

(d) light and sound signals marking the location of the workplace.

Emergency descent control

25. (1) An employer shall provide, on each derrick or other elevated part of a workplace under its control that is a marine installation or structure, where there is only one usual means of escape from that location, a device that would allow a person to descend from the location by another means at a controlled speed in an emergency.

(2) The device shall be capable of being operated notwithstanding the loss of the main source of power.

(3) The employer shall ensure that written instructions for operating the device are kept in a conspicuous place near the location where the device is stored.

Fire and explosion

26. (1) Fire and explosion are prescribed risks for the purpose of paragraph 201.17(2)(a) of the Act and an employer shall ensure that each workplace under its control is designed, constructed, arranged and maintained to minimize those risks.

(2) The occupational health and safety program in respect of a workplace that is a marine installation or structure shall identify

(a) all areas at the workplace, as classified according to a comprehensive and documented classification system, in which flammable, explosive or combustible substances are or are likely to be present in sufficient quantities and for

sufficient periods of time to require special precautions to be taken in the selection, installation or use of machinery and electrical equipment to prevent a fire or explosion; and

(b) the precautions applicable to those areas.

(3) The employer with control over the workplace shall ensure that signs are posted in conspicuous places at each of the areas referred to in subsection (2), identifying them as areas in which there is a risk of fire or explosion.

(4) The employer shall ensure that a person does not use an open flame or other source of ignition in an area referred to in subsection (2) unless they are carrying out hot work in accordance with Part XXVI.

(5) An employer shall ensure that any temporary or portable heating equipment that is used at a workplace under its control is located, protected and used in a manner that prevents the equipment from being overturned or damaged and any combustible materials in the vicinity from igniting.

Firefighting equipment

27. An employer shall equip each workplace under its control with the firefighting equipment that is appropriate for that type of workplace and all classes of fire that may occur there.

Fire team equipment

28. (1) The personal protective equipment that an employer with control over a workplace that is a marine installation or structure shall provide to each of its employees, and any other individual at the workplace, who is tasked with fighting fires includes

(a) a self-contained breathing apparatus with 2 full spare cylinders that

(i) is selected and maintained in accordance with CSA Group standard Z94.4, "Selection, use, and care of respirators",

(ii) conforms to the design and performance requirements in National Fire Protection Association Standard NFPA 1981, "Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services", and

(iii) is equipped with a personal distress alarm device;

(b) life safety ropes, belts and harnesses that conform to the design and performance requirements in National Fire Protection Association Standard NFPA 1983, "Standard on Life Safety Rope and Equipment for Emergency Services", with the provisions of that standard pertaining to flame resistance being read as mandatory; and

(c) personal protective clothing, including boots, gloves, helmet and visor, coat and trousers, that conforms to the design and performance requirements in National Fire Protection Association Standard NFPA 1971, "Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting".

(2) The employer shall also provide,

(a) to each employee referred to in subsection (1),

(i) a portable electric safety lamp that can be easily attached to the employee's clothing and will operate safely in anticipated conditions for at least 3 hours, and

(ii) an axe with an insulated handle and carrying belt; and

(b) to the fire team as a whole, at least 2 two-way portable radiotelephone apparatus that are designed not to produce any spark or other source of ignition.

(3) Notwithstanding subsection (1) and paragraph (2)(a), where a workplace is a ship used for construction or diving or for geotechnical or seismic work, the employer may instead provide fire-fighter's outfits that conform to the International Maritime Organization's "International Code for Fire Safety Systems".

(4) The number of sets of equipment referred to in subsections (1) and (2) or fire-fighter's outfits referred to in subsection (3), as the case may be, that the employer shall provide at the workplace, and their sizing, where applicable, is to be determined having regard to the risk assessment carried out by the employer for the purpose of the occupational health and safety program.

(5) Notwithstanding subsection (4), the number of sets of equipment or outfits, as the case may be, that the employer shall provide is at least

(a) 4, where the workplace is a ship used for construction or diving or for geotechnical or seismic work; or

(b) 10, in any other case.

(6) The employer shall ensure that the equipment provided in accordance with this section is kept ready for use and stored in a place that is easily accessible, with at least 2 sets of equipment or 2 outfits, as the case may be, being easily accessible from the helicopter deck, if any, of the marine installation or structure.

Falls into ocean

29. The risk of a person at a workplace falling into the ocean is a prescribed risk for the purpose of paragraph 201.17(2)(a) of the Act and the employer with control over that workplace shall

(a) provide appropriate life-saving appliances and ensure they are held in readiness;

(b) ensure that a competent person is readily available at all times to operate the life-saving appliances; and

(c) ensure that a fast rescue boat that meets the requirements of Chapter V of the LSA Code is provided, or available from a standby vessel that is no more than 500 metres away, and held in readiness.

Emergency drills and exercises

30. (1) An employer shall establish, for each workplace under its control that is a marine installation or structure and having regard to the risk assessment carried out by it for the purpose of the occupational health and safety program, a plan that describes the emergency drills and exercises that shall be conducted at the workplace in relation to various scenarios and sets out the frequency with which they shall be conducted.

(2) Notwithstanding subsection (1), the employer shall ensure that

(a) a drill to practise mustering is conducted at least once a week;

(b) a fire drill is conducted at least once a month;

(c) a drill to practise escape to the location of lifeboats or life rafts in preparation for abandonment of the workplace is conducted at least once a month;

(d) where the workplace is equipped with lifeboats,

(i) each employee participates, at least once every 6 months, in a drill that requires them to board a lifeboat while wearing an immersion suit and to secure themselves on a seat, and

(ii) where feasible, a lifeboat launching drill is conducted annually to test the integrity and operation of the lifeboats and launching equipment; and

(e) all drills and exercises are repeated as soon as practicable after any significant change to the emergency plan or to the work or activities carried out at the workplace with respect to which an authorization has been issued.

(3) Where compliance with subparagraph (2)(d)(ii) is not feasible, the employer shall ensure that additional inspections and testing of all components that would otherwise be tested by the launching drill are carried out in consultation with the lifeboat manufacturer and with the prior approval of the chief safety officer.

(4) The employer shall schedule drills and exercises to ensure the equitable participation of all employees, regardless of their shift or rotation.

(5) The employer shall ensure that any person visiting the workplace who has not participated in the emergency drills or exercises is accompanied throughout the visit by someone who has done so.

(6) The employer shall keep a record of all emergency drills and exercises conducted that contains

(a) the date on which and the time at which the drill or exercise was conducted;

(b) a description of the drill or exercise scenario;

(c) a list of all persons who participated in the drill or exercise;

(d) the length of time taken to complete the drill or exercise, including the length of time to achieve a full muster; and

(e) observations regarding the execution of the drill or exercise and opportunities for improvement.

(7) The employer shall retain the records referred to in subsection (6) for at least 3 years after the day on which the drill or exercise is carried out.

PART VI
FIRST AID AND MEDICAL CARE

Operator's obligations

31. An operator shall ensure that

(a) a physician who has specialized knowledge in the treatment of illnesses and injuries that may arise at the workplace is readily available at all times to provide medical advice, remotely from a location in the province, to any medic or first aider at the workplace and to be transported to the workplace, where necessary, to provide medical care, unless the workplace has a medic who is a physician with that knowledge;

(b) an emergency medical evacuation service is available at all times for transporting an injured or ill person from the workplace to a hospital onshore using a means of transportation that

(i) is equipped with appropriate first aid and medical supplies,

(ii) is capable of accommodating and securing an occupied stretcher, and

(iii) has one or more competent persons available on board to provide first aid or medical care to the injured or ill person during transportation; and

(c) persons at the workplace have a means of quickly summoning the emergency medical evacuation service.

Employer obligations

32. (1) An employer with control over a workplace shall

(a) when assessing the risk of illness or injury at the workplace for the purpose of the occupational health and safety program, consult with a medic, where one is required at the workplace, and take into account

(i) the location of the workplace and the expected delay in obtaining emergency medical services,

(ii) the layout of the workplace, and

(iii) environmental factors, including thermal considerations;

(b) develop, in consultation with a medic, where one is required at the workplace, and with a specialized dive physician, where a dive project is to be carried out from the workplace, a written medical emergency response plan that addresses all reasonably foreseeable emergencies at the workplace and takes into account the location of the workplace, the time of year at which the work is to be carried out, the expected number of persons at the workplace during normal operations and the workplace's maximum capacity;

(c) determine, in consultation with a medic, where one is required at the workplace, and with a specialized dive physician, where a dive project is to be carried out from the workplace, the type and quantity of first aid and medical supplies and equipment, medication and facilities needed to respond to all reasonably foreseeable injuries and illnesses at the workplace and ensure that those supplies, that equipment, those medications and those facilities are provided, maintained, replenished and replaced as necessary;

(d) establish and make readily available to all persons at the workplace written procedures for promptly obtaining first aid or medical care for any injury or illness, including procedures to follow while awaiting that care;

(e) keep a diagram indicating the location of all first aid kits and medical rooms conspicuously posted at the workplace;

(f) keep an up-to-date list of telephone numbers for use in emergencies conspicuously posted near every fixed telephone at the workplace;

(g) keep a list of all medics and first aiders who are present at the workplace, as well as information on how and when they may be contacted and where they may be located, conspicuously posted in every medical room at the workplace;

(h) keep a list of all medics who are present at the workplace, or, where a medic is not required, of the first aiders who hold the highest level of first aid certificate held by any first aider at the workplace, as well as information on how and when they may be contacted and where they may be located conspicuously posted

(i) on the bridge, where the workplace is a vessel, or

(ii) at the location where the installation manager referred to in section 189.2 of the Act is expected to be during an emergency, where the workplace is not a vessel; and

(i) ensure that the number of first aiders and medics set out in columns 2 to 4 of the following table that correspond to the number of persons at the workplace set out in column 1 are present at the workplace and readily available to provide prompt and appropriate first aid or medical care to persons at the workplace:

TABLE

Item	**Column 1** **Number of persons at the workplace**	**Column 2** **Number of first aiders with standard first aid certificate or higher**	**Column 3** **Number of additional first aiders with advanced first aid certificate or qualifications equivalent to those of a medic**	**Column 4** **Number of medics**
1	6-10	1 plus 1 for every 2	0	0

		persons in excess of 6		
2	11-30	3 plus 1 for every 2 persons in excess of 10	1	0
3	31-40	13 plus 1 for every 2 persons in excess of 30	1	0
4	More than 40	17 plus 1 for every 2 persons in excess of 40	2 plus 1 for every 10 persons in excess of 40	1

(2) The first aid supplies referred to in paragraph (1)(c) shall include first aid kits that

(a) conform to CSA Group standard Z1220, "First aid kits for the workplace";

(b) contain only the supplies necessary for rendering first aid, which are maintained in a clean, dry and serviceable condition;

(c) are inspected at least monthly; and

(d) are clearly identified by conspicuous signs and readily accessible at various locations throughout the workplace.

(3) Where the workplace is a marine installation or structure, the first aid equipment referred to in paragraph (1)(c) shall include

(a) at least one automated external defibrillator in a common area accessible to all persons at the workplace; and

(b) additional automated external defibrillators in the quantities and locations that are necessary, having regard to the risk assessment carried out by the employer for the purpose of the occupational health and safety program.

(4) Where the workplace is a marine installation or structure, the facilities referred to in paragraph (1)(c) shall include a medical room

(a) whose location is clearly identified by conspicuous signs;

(b) that is supervised by a medic or, where a medic is not required at the workplace, a first aider who holds the highest level of first aid certificate held by any first aider at the workplace;

(c) whose location and design allow patients on stretchers to be easily transported to it from other locations at the workplace and from it to any deck from which patients may be transported from the workplace;

(d) that allows for optimum ease of access to persons carrying a patient on a stretcher;

(e) that is maintained in an orderly and sanitary condition and in which all surfaces are easily cleaned and disinfected;

(f) that contains or is located adjacent to a washroom;

(g) that contains

(i) a rectangular treatment table that is accessible from both long sides and at least one short side,

(ii) a medical lamp with an adjustable arm,

(iii) a means of securing a stretcher in place when it is occupied by a patient,

(iv) a handwashing facility supplied with running hot and cold water,

(v) a hand-held shower head that can easily reach the patient,

(vi) a storage cupboard and counter,

(vii) a separate cubicle or curtained-off area with a cot or bed equipped with a moisture-protected mattress and 2 moisture-protected pillows,

(viii) a table and at least 2 chairs,

(ix) a lockable medical chest or cabinet,

(x) a waste receptacle and a means of safely disposing of biohazards and sharp objects,

(xi) sufficient electrical outlets of the appropriate voltage for the equipment to be used in the room, and

(xii) all other medical supplies and equipment that are determined to be necessary under paragraph (1)(c);

(h) in which information is accessible regarding

(i) first aid procedures in respect of any reasonably foreseeable injury or illness at the workplace,

(ii) all hazardous substances at the workplace, including the procedures for treating exposure to them and, in the case of hazardous products, their safety data sheets, if any, or other documents containing hazard information in respect of them, and

(iii) procedures for transporting injured or ill persons within and from the workplace; and

(i) that contains an effective means of hands-free electronic communication with the physician referred to in paragraph 31(a) and other emergency contacts, as well as an up-to-date list of the names and contact information of those persons for use in emergencies.

Medics

33. (1) An employer may designate a person as a medic where that person

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

(b) holds an advanced cardiac life support certificate or basic cardiac life support instructor's certificate issued by an entity that bases its training on International Liaison Committee on Resuscitation guidelines; and

(c) meets one of the following requirements:

(i) they hold a licence to practise medicine in Canada and have at least 2 years' clinical experience in intensive care or emergency practice,

(ii) they hold a registered nursing certificate recognized by a provincial regulatory body and have at least 2 years' clinical experience in intensive care or emergency practice, or

(iii) they hold an advanced care paramedic certificate or critical care paramedic certificate issued by a college in Canada and have at least 3 years' experience as an advanced life support provider.

(2) The designation under subsection (1) shall be made in writing.

(3) The employer shall not assign to the medic any other duties that will interfere with the prompt and adequate provision of first aid and medical care.

(4) When providing first aid or medical care to an injured or ill person, a medic

(a) shall not be overruled by anyone other than the physician referred to in paragraph 31(a); and

(b) shall follow any directions given by the physician referred to in paragraph 31(a).

First aiders

34. (1) An employer shall allow any first aider, and any other employee that the first aider needs for assistance, to provide prompt and adequate first aid to an injured or ill person and ensure that they have adequate time to do so, with no loss of pay or benefits.

(2) When providing first aid to an injured or ill person, a first aider

(a) shall not be overruled by anyone other than a physician, a medic or, where they hold a standard first aid certificate, a first aider with an advanced first aid certificate; and

(b) shall remain in charge of the person's care until the first aid is complete or the person is under the care of a physician, a medic or, where they hold a standard first aid certificate, a first aider with an advanced first aid certificate.

Treatment records

35. (1) A first aider or medic who provides care to an injured or ill person or from whom treatment is sought shall make and sign a record containing the following information:

(a) the full name of the injured or ill person;

(b) a brief description of the injury or illness, and of the occurrence that gave rise to it, if any, including, as applicable, the date on which and the time and location at which the injury or occurrence occurred or the date on which and the time at which symptoms of the illness were first experienced;

(c) a brief description of any treatment provided by the first aider or medic, including the date on which and time at which it was provided; and

(d) a brief description of any arrangements made for the treatment or transportation of the injured or ill person.

(2) The employer with control over the workplace at which the record is made shall retain it, from the day on which the injury or illness is first documented, for

(a) 40 years, in the case of treatment for an occupational disease or exposure to a hazardous substance;

(b) 10 years, in the case of treatment for an injury resulting from an incident, other than exposure to a hazardous substance, or for a musculoskeletal injury, as defined in subsection 41(3); or

(c) 5 years, in any other case.

PART VII
EMPLOYEE WELL-BEING

Occupational health and safety program

36. An occupational health and safety program shall set out measures for promoting mental health and healthy lifestyles and shall address substance abuse, the effects on mental health of working in a remote location and the management of mental illness.

Impairment

37. (1) Impairment, including as a result of fatigue, stress, injury, illness, another physical or psychological condition, alcohol or drugs, is a prescribed risk for the purpose of paragraph 201.17(2)(a) of the Act and an occupational health and safety program shall

(a) set out the roles and duties of all workplace parties in identifying and preventing the consequences of impairment on the health and safety of employees;

(b) identify factors that may contribute to impairment or its causes, such as work and workplace conditions, work scheduling and task type and length;

(c) require that the factors referred to in paragraph (b) be regularly monitored at the workplace and taken into account, in conjunction with incident reports, employee complaints, workplace committee reports and records of excess work hours kept under paragraph (e) or subsection 39(3), to identify any potential impairment;

(d) require the development, maintenance and implementation of an appropriate work shift design that allows adequate rest periods;

(e) require records to be kept of hours worked by an employee beyond their usual shift or rotation; and

(f) require that the risk of fatigue be taken into account in developing all workplace procedures.

(2) An employer shall ensure that no employee at a workplace under its control is permitted to work where their ability to do so is impaired in a manner that is likely to be hazardous to their health or safety or that of any other person at the workplace.

(3) Impairment shall be considered as a potential causal factor in the investigation of all incidents at the workplace.

Fatigue training

38. The instruction and training that an employer shall provide to its employees includes instruction and training on the factors that contribute to fatigue, procedures for identifying and reporting fatigue and the role and duties of employees in managing fatigue.

Rest periods

39. (1) An employer shall ensure that an employee does not work at a workplace under its control unless they have been provided with a period of at least 11 consecutive hours of rest in the previous 24 hours.

(2) An employer may, in extenuating circumstances, allow an employee to work without having had the rest period referred to in subsection (1) where the employer has assessed the risk associated with the employee working the extra hours and determined, in consultation with the employee, that the work can be carried out without increased risk to their health or safety.

(3) Where an employer allows an employee to work without having had the rest period referred to in subsection (1), the employer shall ensure that a description of the work, the name of the employee, the hours worked, the reason for the exception and the result of the risk assessment referred to in subsection (2) are recorded.

(4) Subsection (1) does not apply in the event of an emergency at the workplace that may be hazardous to the health or safety of employees.

(5) Notwithstanding subsections (1) and (2), the employer with control over a workplace for which an authorization has been issued for a period of less than 6 months may alternatively comply, in respect of the marine crew, with the daily hours of work and minimum rest requirements outlined in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978.

Thermal stress

40. Thermal stress is a prescribed risk for the purpose of paragraph 201.17(2)(a) of the Act and an employer shall ensure, in respect of all persons at each workplace under its control who may be exposed to heat or cold, that

(a) their exposure is kept below the applicable threshold limit value or action limit established by the American

Conference of Governmental Industrial Hygienists in its publication "TLVs and BEIs: Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices", as the case may be;

(b) they are informed of the risk and advised of measures to be taken to minimize their exposure to it;

(c) they are regularly monitored for signs of thermal stress;

(d) they are provided with clothing and equipment that offers protection against thermal stress;

(e) screens or shelters are provided to protect them against the elements, where applicable;

(f) measures are taken to acclimatize them to temperatures at the workplace;

(g) hot or cold beverages, as the case may be, are made available to them; and

(h) work schedules, including rest periods, are established having regard to thermal stress.

Musculoskeletal injury

41. (1) Musculoskeletal injury is a prescribed risk for the purpose of paragraph 201.17(2)(a) of the Act and the procedures referred to in that paragraph shall include an assessment, in consultation with the following persons, of the extent to which that risk is associated with each type of work carried out at the workplace:

(a) a representative sample of employees who are required to carry out that type of work; and

(b) employees who have signs or symptoms of musculoskeletal injury.

(2) The employer shall ensure that interim hazard control measures are implemented without delay after the risks of musculoskeletal injury are assessed and permanent measures, determined with regard to the parameters established by the American Conference of Governmental Industrial Hygienists in its

publication "TLVs and BEIs: Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices", are implemented as soon as practicable.

(3) In this section, "musculoskeletal injury" means an injury to or disorder of the muscles, tendons, ligaments, joints, nerves, blood vessels or related soft tissue, including a sprain, strain or inflammation.

Workplace violence and harassment

42. (1) Workplace violence and harassment is a prescribed risk for the purpose of paragraph 201.17(2)(a) of the Act and an employer shall develop and post at a place accessible to all employees a policy setting out the employer's commitment to

(a) provide a safe, healthy and violence and harassment-free workplace;

(b) dedicate sufficient attention, resources and time to address factors that contribute to workplace violence and harassment;

(c) communicate to its employees information in its possession about the factors referred to in paragraph (b); and

(d) assist employees who have been exposed to workplace violence and harassment.

(2) An occupational health and safety program shall

(a) require that the assessment of the risk of violence and harassment at the workplace take into account the nature of the work carried out at the workplace, the conditions under which that work is carried out and previous experiences at the workplace and other similar workplaces; and

(b) include procedures for

(i) summoning immediate assistance in response to violence that poses an immediate risk of physical injury,

(ii) reporting incidents of workplace violence and harassment to the employer or a supervisor, and

(iii) investigating and addressing reports of workplace violence and harassment.

(3) The training that an employer shall provide to each of its employees includes training on the factors that contribute to workplace violence and harassment.

(4) In this section, "workplace violence and harassment" means any action, conduct or comment, including of a sexual nature, that can reasonably be expected to cause offence, humiliation or other physical or psychological injury or illness to an employee.

Disruptive behaviour

43. An employer shall instruct all employees at each workplace under its control to refrain from engaging in disruptive behaviour at the workplace that may be hazardous to themselves or any other person.

PART VIII
PERSONAL PROTECTIVE EQUIPMENT

Employee obligations

44. (1) The personal protective equipment that an employee shall use or wear for the purpose of paragraph 201.24(b) of the Act includes, in respect of any hazard to which they are exposed, all personal protective equipment that the employer or operator provides to them for the purpose of preventing or reducing injury from that hazard.

(2) An employee shall ensure that any clothing worn by them does not interfere with the proper functioning of any personal protective equipment used or worn by them.

Requirements

45. An employer shall ensure that all personal protective equipment that it provides to its employees, or to other individuals at a workplace under its control,

(a) is designed to effectively protect the user or wearer from the hazard for which it is provided;

(b) is selected having regard to any other hazards in the work area in which it is intended to be used or worn;

(c) does not create a hazard when used or worn for the purpose for which it is provided;

(d) is compatible with all other personal protective equipment that the employer provides to be used or worn at the same time, so that one item of equipment does not make another item ineffective; and

(e) is maintained in good working order and in a clean and sanitary condition.

Prescribed equipment

46. The personal protective equipment that an employer shall provide to its employees and other individuals at a workplace under its control includes

(a) where the workplace is a marine installation or structure,

(i) emergency escape breathing devices that conform to the International Maritime Organization's "International Code for Fire Safety Systems" and that, where they are to be used for escape from an atmosphere that is immediately dangerous to life and health,

(A) have a rated service time in excess of the anticipated time needed to reach the nearest temporary safe refuge or muster station, and

(B) where they are multifunctional self-contained breathing apparatuses or airline respirators, have an auxiliary self-contained air supply with a rated service time in excess of the anticipated time needed to allow for escape by way of the planned escape route and, in any event, of not less than 15 minutes, or

(ii) respirators for the purpose of escape that are selected in accordance with CSA Group standard Z94.4, "Selection, use, and care of respirators";

(b) where the workplace is a marine installation or structure, immersion suits that

(i) conform to

(A) Chapter II of the LSA Code and IMO Resolution MSC.81(70), with the provisions of that Resolution being read as mandatory, or

(B) Underwriters Laboratories standard ANSI/CAN/UL 15027-2, "Standard for Immersion Suits – Part 2: Abandonment Suits, Requirements Including Safety", and

(ii) are appropriate for all expected environmental conditions in the vicinity of the workplace, all situations that may require emergency evacuation and the time it would take for rescue operations to reach the area and complete a rescue;

(c) where the workplace is a workboat, an anti-exposure suit for each employee or individual that

(i) conforms to Chapter II of the LSA Code and IMO Resolution MSC.81(70), with the provisions of that Resolution being read as mandatory, and

(ii) is appropriate for all expected environmental conditions in the vicinity of the workplace;

(d) where the employee or individual is in the vicinity of moving equipment or loads, personal protective clothing that conforms to CSA Group standard Z96, "High-visibility safety apparel", other than the provisions of that standard that pertain to marking, and that is selected in accordance with that standard's annex on selection, which is to be read as mandatory;

(e) where the employee or individual may be exposed to a risk of head injury, protective headwear that conforms to CSA Group standard Z94.1, "Industrial protective headwear — Performance, selection, care, and use", other than the provisions of that standard that pertain to marking;

(f) where the employee or individual may be exposed to a risk of injury to the eyes, face, ears or front of the neck, eye or face protectors that conform to CSA Group standard Z94.3, "Eye and face protectors", other than the provisions

of that standard that pertain to marking, and that are compatible with any corrective lenses worn by the employee or individual;

(g) where the employee or individual may be exposed to a risk of foot injury or electric shock through footwear, protective footwear that conforms to

(i) CSA Group standard Z195, "Protective footwear", other than the provisions of that standard that pertain to marking,

(ii) ASTM International standard F2413, "Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear", other than the provisions of that standard that pertain to marking, or

(iii) International Organization for Standardization standard ISO 20345, "Personal protective equipment - Safety footwear", other than the provisions of that standard that pertain to marking;

(h) where the employee or individual may be exposed to noise levels exceeding the threshold limit value for sound, other than while diving, personal protective equipment that conforms to and is selected and maintained in accordance with CSA Group standard Z94.2, "Hearing protection devices - Performance, selection, care, and use";

(i) where the employee or individual may be exposed to a hazard from a type of gas that can be monitored with a personal gas monitoring device, a device of that type that is explosion-proof and has been calibrated in accordance with the manufacturer's instructions;

(j) where the employee or individual may be exposed to fire or radiated heat from fire, personal protective clothing that conforms to the design and performance requirements set out in Canadian General Standards Board standard CAN/CGSB 155.20, "Workwear for protection against hydrocarbon flash fire and optionally steam and hot fluids", or in Chapter 7 of National Fire Protection Association standard NFPA 2112, "Standard on Flame-Resistant

Clothing for Protection of Industrial Personnel Against Short-Duration Thermal Exposures from Fire";

(k) where the employee or individual may be exposed to respiratory hazards, respiratory protective equipment that is

(i) selected and maintained in accordance with CSA Group standard Z94.4, "Selection, use, and care of respirators", and

(ii) in the case of a pressure-demand self-contained breathing apparatus that is to be used in atmospheres that are immediately dangerous to life and health, equipped with an audible alarm that sounds when the air supply has diminished to 33 percent of its capacity;

(l) where the employee or individual may be exposed to a risk of injury to or through the skin, an effective shield, screen, cream, lotion or body covering; and

(m) where the employee or individual is exposed to a risk of falling into the water,

(i) a life jacket that is appropriate for all expected environmental conditions and conforms to Chapter II of the LSA Code and IMO Resolution MSC.81(70), with the provisions of that Resolution being read as mandatory,

(ii) a personal flotation device that is appropriate for all expected environmental conditions and

(A) has been approved by the federal Minister of Transport, the Canadian Coast Guard or the United States Coast Guard,

(B) is appropriate for the weight of the person who will wear it,

(C) has sufficient buoyancy to keep the person's head afloat, and

(D) is capable of being inflated manually, regardless of whether it is also equipped with automated inflation technology, or

(iii) a fall-arrest system as described in paragraph 109(1)(d).

Respiratory protective equipment

47. (1) An employer shall ensure that any respiratory protective equipment that they provide to employees or other individuals at a workplace under its control is used in accordance with CSA Group standard Z94.4, "Selection, use, and care of respirators".

(2) The employer shall ensure that any respiratory protective equipment that supplies air is used only where

(a) that air conforms to either CSA Group standard Z180.1, "Compressed breathing air and systems" or European Committee for Standardization (CEN) standard EN 12021, "Respiratory equipment — Compressed gases for breathing apparatus"; and

(b) the system that supplies the air is tested, operated and maintained in accordance with CSA Group standard Z180.1, "Compressed breathing air and systems".

Personal gas monitoring device

48. An employer shall ensure that each personal gas monitoring device used at a workplace under its control is bump tested before each use.

Records

49. Notwithstanding subsection 87(2), an employer shall retain the records referred to in paragraph 87(1)(f) in respect of all personal protective equipment that they provide for as long as the equipment is in service.

PART IX
PASSENGERS IN TRANSIT

Transit by helicopter

50. (1) The information and instruction that an operator shall, for the purpose of paragraph 201.11(1)(a) of the Act, ensure is provided to each of the employees and other passengers being transported on a helicopter to or from any of its workplaces includes

(a) an overview of the helicopter's layout and features, including the location of emergency exits and equipment, including life rafts;

(b) instruction on precautionary measures to be taken when embarking and disembarking and while en route;

(c) the role of passengers during emergencies, including the means by which passengers may communicate directly with the pilot to alert them of an emergency;

(d) a demonstration of the donning and doffing of the helicopter passenger transportation suit systems provided in accordance with subsection (3) and instruction on the use of the emergency underwater breathing apparatus provided in accordance with that subsection; and

(e) instruction on escape and abandonment procedures, including the use of the life rafts referred to in paragraph (2)(b).

(2) The equipment and devices with which an operator shall, for the purpose of paragraph 201.11(2)(b) of the Act, ensure that any helicopter going to or from any of its workplaces is equipped includes

(a) equipment that permits the helicopter's flight path to be tracked at all times; and

(b) life rafts, each of which is equipped with 2 position indicating devices, in sufficient numbers to accommodate all passengers on board, having regard to the passengers' space requirements and weight while wearing helicopter passenger transportation suit systems.

(3) The personal protective equipment that an operator shall, for the purpose of paragraph 201.11(3)(a) of the Act, ensure is provided to each of the employees and other passengers on a helicopter going to or from any of its workplaces includes

(a) a helicopter passenger transportation suit system and life preserver that conform to the "Airworthiness Manual" published by the federal Department of Transport; and

(b) an emergency underwater breathing apparatus (EUBA) that conforms to the *Canadian Aviation Regulations*.

(4) The training that an operator shall, for the purpose of paragraph 201.11(3)(b) of the Act, ensure is provided to each of the employees and other passengers on a helicopter going to or from any of its workplaces includes

(a) practice in donning and doffing the helicopter passenger transportation suit system that is provided to them; and

(b) the training referred to in paragraph 602.66(1)(c) of the *Canadian Aviation Regulations* in respect of the emergency underwater breathing apparatus that is provided to them.

(5) The requirements to provide or wear a helicopter passenger transportation suit system or emergency underwater breathing apparatus or to provide training in their use do not apply in respect of any passenger in respect of whom there is an exemption, under subsection 5.9(2) of the *Aeronautics Act* (Canada), from the requirements under the *Canadian Aviation Regulations* respecting the wearing of a helicopter passenger transportation suit system or the use of an emergency underwater breathing apparatus.

Transit by vessel

51. (1) The information and instruction that an operator shall, for the purpose of paragraph 201.11(1)(a) of the Act, ensure is provided to each of the employees and other passengers being transported on a vessel to or from any of its workplaces includes

(a) an overview of the vessel's layout and features, including the location of muster stations and emergency exits and equipment, including lifeboats and life rafts;

(b) the meaning of alarms;

(c) instruction on precautionary measures to be taken when embarking and disembarking and while en route;

(d) the role of passengers during emergencies;

(e) a demonstration of the donning and doffing of the immersion suits provided in accordance with subsection (3); and

(f) instruction on escape and abandonment procedures, including the use of the lifeboats and life rafts referred to in paragraph (2)(b).

(2) The equipment and devices with which an operator shall, for the purpose of paragraph 201.11(2)(b) of the Act, ensure that any vessel going to or from any of its workplaces is equipped includes

(a) equipment that permits the vessel's path to be tracked at all times; and

(b) lifeboats or life rafts, each of which is equipped with 2 position indicating devices, in sufficient numbers to accommodate all passengers on board, having regard to the passengers' space requirements and weight while wearing immersion suits and the maximum weight capacity of the boats' or rafts' launching appliances.

(3) The personal protective equipment that an operator shall, for the purpose of paragraph 201.11(3)(a) of the Act, ensure is provided to each of the employees and other passengers on a vessel going to or from any of its workplaces includes a properly fitted immersion suit that conforms to paragraph 46(b).

(4) The training that an operator shall, for the purpose of paragraph 201.11(3)(b) of the Act, ensure is provided to each of the employees and other passengers on a vessel going to or from any of its workplaces includes practice in donning and doffing the immersion suit that is provided to them.

Safe entry and exit

52. (1) An operator shall establish procedures for safe entry to and exit from each of its workplaces that is a marine installation or structure, including procedures respecting the use of gangways and fast rescue boats to transfer persons between marine installations and structures.

(2) The procedures shall not permit the use of swing ropes for entry to or exit from a marine installation or structure.

PART X
WORK PERMITS

Contents

53. (1) A work permit that is required by these regulations shall be issued, in either paper or electronic form, by a competent person designated by the employer with control over the workplace at which the activity to which the work permit relates is carried out and shall be approved by a second competent person designated by that employer.

(2) A work permit shall set out

(a) the name of the person who issued it and the person who approved it;

(b) the name of each person to whom it is issued;

(c) the periods during which the permit is valid;

(d) the activity to which the permit relates, the location at which the activity is to be carried out and any restrictions to which it is subject;

(e) any circumstances under which the activity is to be carried out that may have an effect on the health and safety risks associated with it, including

(i) environmental conditions,

(ii) impediments to the proper use of any equipment or other thing, and

(iii) other activities being carried out in the area, with reference to any permit or certificate associated with those activities;

(f) work procedures, including those that apply to a specific space, task, material, type of equipment or system, that are developed having regard to the circumstances referred to in paragraph (e) and are to be followed to minimize the health and safety risks associated with the activity, including

(i) any equipment, machine, device or system that is required to be locked out,

(ii) any tests that are required to be performed before, during and after the activity,

(iii) the particulars of any tags or signs to be used,

(iv) any protective equipment to be used,

(v) the procedures to be followed in the case of an emergency or any other change in the conditions in which the activity is carried out, the persons involved or the equipment being used, and

(vi) procedures for addressing any impediment to the proper use of any equipment or other thing;

(g) any other engineering and administrative control measures in relation to the activity that are necessary for the health and safety of persons at the workplace;

(h) the identification number of any lock used in a lockout referred to in subparagraph (f)(i);

(i) the results of any tests referred to in subparagraph (f)(ii), the date on which and time at which they were performed and the signature of the person who performed them; and

(j) any other information or documentation that is necessary to ensure that all persons involved in the activity are informed of the health and safety risks associated with it.

(3) The work permit shall be signed by the person who issued it, the person who approved it and every person involved in the activity to which it relates, to certify that they have read and understood its contents.

Occupational health and safety program

54. An occupational health and safety program shall address the issuance and use of work permits, including

(a) activities that require a work permit;

(b) the work permit issuance process, including roles and responsibilities in obtaining or issuing a work permit, having

regard to the nature of the activity to which the permit relates;

(c) methods of assessing hazards;

(d) methods of communicating information about work permits to affected employees;

(e) the instruction and training to be given to employees with respect to work permits; and

(f) record-keeping requirements in relation to work permits.

Employer obligations

55. (1) An employer shall ensure that

(a) every activity that requires a work permit and is carried out at a workplace under its control is carried out in accordance with a work permit; and

(b) every work permit issued at a workplace under its control is made readily available to employees for the duration of the activity to which it relates.

(2) An employer shall retain a copy of each work permit issued at a workplace under its control for at least 3 years after the day on which the activity to which it relates is completed.

PART XI
FACILITIES

Application

56. This Part applies in respect of a workplace that is a marine installation or structure.

Accommodations area

57. (1) An employer shall ensure that the accommodations area at each workplace under its control

(a) is constructed in a manner that allows it to be easily cleaned and disinfected;

(b) is constructed so that sleeping quarters are not exposed to sound levels in excess of 70 decibels;

(c) is equipped with adequate water and sewage systems;

(d) is equipped with adequate heating, air-conditioning and ventilation systems that ensure that

(i) its thermal conditions conform to ANSI/American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standard 55, "Thermal Environmental Conditions for Human Occupancy", and

(ii) its ventilation rate conforms to ANSI/ American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standard 62.1, "Ventilation for Acceptable Indoor Air Quality"; and

(e) is maintained in a clean and sanitary condition and in good repair.

(2) The employer shall ensure that equipment is not stored in an accommodations area unless the equipment

(a) is intended to be used in the accommodations area; and

(b) is stored in a closet that is provided for that purpose and fitted with a door.

Washrooms

58. (1) An employer shall make available a sufficient number of washrooms for use by persons of all gender identities at each workplace under its control, in locations conveniently accessible from all work areas.

(2) Where there are multiple toilets within a washroom, the employer shall ensure that

(a) each toilet is partitioned in a separate stall with a solid, properly closing door and fastener to ensure privacy; and

(b) where the washroom is for use by persons of more than one gender identity, the partitions and doors extend from floor to ceiling.

(3) The employer shall ensure that all washrooms

(a) contain handwashing facilities as described in subsection 60(2);

(b) are, on their floors and the lower 15 centimetres of their walls and partitions, watertight, except for drains, and impervious to moisture;

(c) are adequately heated;

(d) are adequately ventilated;

(e) are maintained in a clean and sanitary condition and in good repair;

(f) are provided with a sufficient supply of toilet paper; and

(g) are provided with a waste receptacle with a lid.

Portable toilet units

59. (1) Where the number of washrooms at a workplace is not sufficient to accommodate the number of persons at that workplace during its commissioning or decommissioning, the employer with control over the workplace may satisfy its obligations under subsection 58(1) by supplementing the available washrooms with portable toilet units.

(2) The employer shall ensure that all portable toilet units

(a) are supplied with

(i) soap in a dispenser, clean water and disposable towels, or

(ii) hand sanitizer;

(b) are emptied and serviced at regular intervals in accordance with good hygiene practice; and

(c) satisfy the requirements set out in paragraphs 58(3)(d) to (g).

Handwashing facilities

60. (1) An employer shall make available a sufficient number of handwashing facilities for use by persons at each workplace under its control, in locations conveniently accessible from all work areas.

(2) The employer shall ensure that all handwashing facilities

(a) have a supply of either clean hot and cold or clean warm water;

(b) are supplied with soap in a dispenser;

(c) are supplied with individual clean and sanitary towels or another suitable means of drying hands; and

(d) are maintained in a clean and sanitary condition and in good repair.

Showers

61. (1) An employer shall make available a sufficient number of showers for use by persons at each workplace under its control.

(2) The employer shall ensure that all showers

(a) are designed for use by one person at a time, with walls, partitions or curtains in place as necessary to ensure privacy;

(b) have floors and walls that are watertight, except for drains, and impervious to moisture;

(c) have a supply of clean hot and cold water;

(d) are supplied with individual clean and sanitary towels; and

(e) are maintained in a clean and sanitary condition and in good repair.

Changing facilities

62. An employer shall provide, at each workplace under its control, a changing facility that

(a) is located adjacent to a washroom;

(b) is of sufficient size to allow employees to change in and out of work clothing;

(c) has, for each employee at the workplace who is on rotation, a locker with sufficient capacity to store the employee's personal clothing while they are working and their work clothing and equipment while they are not working;

(d) has sufficient capacity to allow for storage of personal protective equipment belonging to off-rotation employees, where there is insufficient storage available to those employees in their sleeping quarters; and

(e) contains a means of drying wet clothing.

Sleeping quarters

63. (1) An employer shall ensure that the sleeping quarters at each workplace under its control contain, for each person assigned to those quarters,

(a) a standalone bed or bunk

(i) that has inner dimensions of at least 1.98 metres by 80 centimetres,

(ii) that is not part of a unit that is more than double-tiered,

(iii) whose bottom is at least 30 centimetres off the floor, where it is a standalone bed or the lower bunk in a double-tiered unit, or approximately midway between the bottom of the lower bunk and the ceiling, where it is the upper bunk in a double-tiered unit,

(iv) that is equipped with an access ladder and a suitable barrier to protect against falls, where it is the upper bunk in a double-tiered unit,

(v) that can be easily cleaned and disinfected, and

(vi) that is supplied with clean and sanitary bedding;

(b) a storage area fitted with a locking device to hold the employee's personal belongings; and

(c) a reading lamp.

(2) An employer shall, to the extent feasible, assign each person at a workplace under its control their own sleeping quarters with direct access to their own washroom containing a shower.

(3) Where compliance with subsection (2) is not feasible, the employer shall

(a) assign no more than 2 persons to sleep in the same sleeping quarters at the same time, unless a greater number is approved in advance by the chief safety officer on a short-term basis; and

(b) where the workplace is a marine installation or structure used for drilling or production or as a living accommodation, ensure that all persons have direct access from their sleeping quarters to a washroom containing a shower and that no more than 2 sleeping quarters have direct access to the same washroom.

Dining area

64. An employer shall ensure the provision, at each workplace under its control, of a dining area that is

(a) of sufficient size to allow individual seating and table space for each employee expected to be using the area at one time;

(b) separated from any place containing a hazardous substance that may contaminate food, dishes or utensils;

(c) provided with waste receptacles; and

(d) maintained in a clean and sanitary condition and in good repair.

Smoking areas

65. (1) It is prohibited to smoke or use a vaping device at a workplace other than in an area designated for that purpose by the employer with control over the workplace.

(2) An employer shall select any area that it designates as an area in which smoking or the use of a vaping device is permitted having regard to

(a) the area's proximity to fire and explosion hazards; and

(b) the need to prevent exposure of other persons at the workplace to emissions, both directly from the product and as exhaled by the user, from smoking or the use of a vaping device.

(3) It is prohibited to smoke or use a vaping device, even within a designated area, on the deck of a marine installation or structure

where drilling or production activities are being carried out in the vicinity.

(4) The employer shall ensure, with respect to any indoor area that it designates as an area in which smoking or the use of a vaping device is permitted, that

(a) the designated area is maintained under negative pressure with respect to the adjacent area;

(b) the designated area is separated from the adjacent area by solid walls, floors and ceilings and solid doors equipped with an automatic closing mechanism; and

(c) air transfer into the designated area is maintained at a rate of at least 24 litres per second per occupant, regardless of whether the doors are open or closed, and air is not recirculated.

(5) An employer shall ensure that signage is posted outside each entrance to an area in which smoking or the use of a vaping device is permitted, indicating

(a) that persons entering the area may be exposed to emissions from smoking or the use of a vaping device; and

(b) the area's maximum occupancy level, as determined with regard to its air transfer rate, where the area is indoors.

(6) Where an employer removes the designation of an area as an area in which smoking or the use of a vaping device is permitted, it shall ensure that the signage referred to in paragraph (5)(a) remains posted outside each entrance to the area until the area contains no residual contaminants from the smoking or vaping activity.

PART XII
SANITATION AND HOUSEKEEPING

Waste material

66. The risks associated with the accumulation of and exposure to waste material, including garbage, recyclable refuse, food waste and debris, are prescribed risks for the purpose of paragraph 201.17(2)(a) of the Act and an employer shall ensure, at each workplace under its control, that

(a) waste material is collected, handled, segregated and removed in a safe and hygienic manner;

(b) waste receptacles and other facilities for disposing of and storing waste material are provided to prevent its hazardous accumulation; and

(c) all waste receptacles that are provided in dining and food preparation areas or that are intended to hold waste material that could give rise to a hazard, including waste material that is flammable or combustible, are

(i) made of fire-rated material,

(ii) leakproof,

(iii) fitted with a tight-fitting lid, and

(iv) maintained in good working order and in a clean and sanitary condition.

Pests

67. (1) The risks associated with the presence of pests are prescribed risks for the purpose of paragraph 201.17(2)(a) of the Act and an employer shall ensure that the enclosed parts of each workplace under its control are constructed, equipped and maintained in a manner that prevents, to the extent feasible, the entry of pests.

(2) Where pests have entered an enclosed part of the workplace, the employer shall immediately take all steps necessary to eliminate the pests and prevent their re-entry.

(3) The occupational health and safety program shall provide for the keeping of pest control inspection and pesticide application records.

Cleanliness and orderliness

68. The hazard control measures set out in an occupational health and safety program shall include procedures for

(a) maintaining the workplace in a clean and orderly state;

(b) ensuring that all surfaces at the workplace on which a person may stand are kept free of slipping and tripping hazards; and

(c) ensuring that all cleaning of the workplace is carried out in a manner that does not allow dust or any other substance that may be harmful to employees' health or safety to contaminate the air.

Storage

69. An employer shall ensure that all things at each workplace under its control are stored or placed in a manner that does not present a hazard to the health or safety of any person, including by

(a) impeding the safe movement of persons, equipment or things through corridors, entrances or exits;

(b) impeding access to or the use of firefighting, first aid or other emergency equipment;

(c) interfering with the operation of fixed fire protection equipment;

(d) impeding access to electrical panels, equipment control panels or emergency disconnect switches or devices;

(e) obstructing ventilation or illumination;

(f) exceeding the maximum load-carrying capacity of the thing on which they are stored or placed; or

(g) being stacked in a manner that makes them unstable.

PART XIII
FOOD AND POTABLE WATER

Food safety

70. The risks arising from the consumption of unsafe food are, in respect of every workplace at which food is served, prescribed risks for the purpose of paragraph 201.17(2)(a) of the Act and the employer with control over the workplace shall ensure that

(a) all preparation, storage, handling or serving of food is done in accordance with the Codex Alimentarius Commission's "Recommended International Code of Practice: General Principles of Food Hygiene", as set out in its publication "Food Hygiene (Basic Texts)", with the recommendations in the Code being read as mandatory;

(b) foods that require refrigeration to prevent them from becoming hazardous to health are maintained at a temperature of 4 degrees Celsius or lower;

(c) foods that require freezing to prevent them from becoming hazardous to health are maintained at a temperature of -18 degrees Celsius or lower; and

(d) temperature logs are maintained for hot and cold holding units, including refrigerators and freezers.

Potable water

71. (1) An employer shall provide, to all persons at each workplace under its control, potable water for drinking and food preparation and shall ensure that clean and sanitary cups are provided for drinking water that is not provided from a drinking fountain.

(2) The risks associated with the consumption of non-potable water are prescribed risks for the purpose of paragraph 201.17(2)(a) of the Act and an occupational health and safety program shall

(a) provide for on-site oversight by a competent person of the daily operation of the system by which potable water is provided;

(b) require notification of the workplace committee or coordinator, as the case may be, of any samples taken from that system that fail to meet the requirements for potable water;

(c) set out procedures for addressing any failures of the system to provide water that meets the requirements for potable water; and

(d) address the keeping of records relating to the system, its oversight and its performance.

(3) In this section, "potable water" means water that conforms to the federal Department of Health's "Guidelines for Canadian Drinking Water Quality".

PART XIV
LIGHTING

Non-application

72. This Part does not apply to the lighting of the bridge of a mobile offshore drilling unit or the bridge of any ship used for construction, production or diving or for geotechnical or seismic work.

Minimum levels

73. An employer shall, in respect of each workplace under its control, ensure that

(a) all persons at the workplace have sufficient lighting, in terms of both quantity and quality, to perform all of their tasks safely; and

(b) where the workplace is a marine installation or structure, the average level of lighting at a work position or in an area referred to in column 1 of the following table is not less than that set out in column 2 when the workplace's primary lighting system is operational.

TABLE

Item	**Column 1** **Work Position or Area**	**Column 2** **Minimum Average Level (in lx)**
1	Office areas:	
	(a) work positions at which cartography, drafting, plan reading or other tasks requiring high visual precision are performed	800
	(b) work positions at which business machines are operated or prolonged reading or writing tasks are performed	500
	(c) other areas	50
2	Laboratories:	
	(a) work positions at which instruments are read or hazardous substances are handled, where errors in such reading or handling may be hazardous to the health or safety of an employee	800
	(b) work positions at which close or	500

	prolonged attention is given to laboratory work	
	(c) other areas	50
3	Workshops and garages:	
	(a) work positions at which fine or medium bench, machine or repair work is performed	500
	(b) work positions at which rough bench, machine or repair work is performed	300
	(c) other areas	50
4	Process areas:	
	(a) work positions in major control rooms or rooms with dial displays at which tasks essential to the control of equipment or machinery that may be hazardous to the safety of employees are performed	800
	(b) work positions at which a hazardous substance is used, stored or handled	500
	(c) work positions at which gauges and meters that are not self-illuminating are located	50
	(d) other areas	20
5	Loading platforms and warehouses:	
	(a) work positions at which packages or goods are checked or sorted	150
	(b) work positions at which loading or unloading work is frequently performed	100
6	Storage areas:	
	(a) areas in which there is a high level of activity	50
	(b) other areas	20
7	Derricks, drill floors and moon pools:	
	(a) work positions at which there is a high level of activity	100
	(b) other areas	20
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	100
	(b) other areas	50

9	Medical rooms:	
	(a) work positions at which first aid or medical care is rendered or examinations are conducted or at which other tasks essential to the health or safety of an employee are performed	1000
	(b) other areas	500
10	Food preparation areas:	
	(a) work positions at which prolonged cutting or preparation tasks are performed	1000
	(b) other areas	300
11	Dining areas and recreation areas	200
12	Sleeping quarters	100
13	Washrooms and showers	200
14	Boiler, engine, ballast control and generator rooms	200
15	Rooms in which principal heating, ventilation or air-conditioning equipment is installed	70
16	Emergency shower facilities, emergency equipment locations, muster stations, temporary refuge areas and lifeboat and life raft locations	50

Emergency lighting

74. (1) An employer shall ensure that each workplace under its control that is a marine installation or structure is equipped with an emergency lighting system that

(a) turns on automatically where the primary lighting system fails; and

(b) provides sufficient dependable illumination to enable all emergency measures to be carried out, including emergency shutdown procedures and evacuation of persons from the workplace.

(2) The employer shall ensure that the emergency lighting system is verified to be in working order at least once a month.

Handling, storage and disposal

75. An employer shall ensure that lighting components and bulbs at each workplace under its control are handled, stored and disposed of in

accordance with the manufacturer's instructions and in a manner that does not pose a risk to any person.

PART XV
SOUND LEVELS

Unimpeded communication

76. An employer shall ensure that sound levels at each workplace under its control do not impede communication during normal or emergency operations.

Noise

77. (1) Excessive noise is a prescribed risk for the purpose of paragraph 201.17(2)(a) of the Act and an employer shall ensure, with respect to each workplace under its control, other than an underwater area, that

(a) noise surveys are carried out in accordance with CSA Group standard Z107.56, "Measurement of noise exposure";

(b) to the extent feasible, the threshold limit value for sound is not exceeded; and

(c) where it is not feasible to reduce sound levels at the workplace to within the threshold limit value,

(i) signs are posted at the entrances to or on the periphery of areas where employees may be exposed to excessive sound levels that clearly indicate the presence of a noise hazard and identify the personal protective equipment that is required in that area, and

(ii) every employee at the workplace undergoes an audiometric test every 2 years, or more frequently as recommended by an audiologist or occupational physician.

(2) The employer shall retain the results of all noise surveys for at least 10 years after the day on which they were carried out.

(3) The instruction and training that an employer shall provide to its employees includes instruction and training on the risks posed by excessive noise.

PART XVI
VENTILATION

Air quality

78. (1) Poor air quality is a prescribed risk for the purpose of paragraph 201.17(2)(a) of the Act and an employer shall ensure that all contaminants in the air at each workplace under its control are kept below the applicable threshold limit values, including, where the workplace is a marine installation or structure, through the installation, use, maintenance and testing of appropriate ventilation systems and other engineering controls.

(2) The ventilation systems shall, where feasible, include local exhaust ventilation systems where necessary to prevent contaminants from entering an employee's breathing zone while the employee is working.

Ventilation system

79. An employer shall ensure, with respect to any ventilation system installed at a workplace under its control, that

(a) it is equipped with a device that provides a warning where the system is not working properly;

(b) all contaminants that it removes are exhausted clear of the area from which they are drawn and prevented from entering any work area or accommodations area;

(c) it and any humidification equipment that forms a part of it

(i) are constructed and maintained in a manner that minimizes the growth and dissemination through the system of micro-organisms, insects and mites, and

(ii) where feasible, are readily accessible for cleaning and inspection; and

(d) unless it is installed in an accommodations area, its minimum ventilation rate conforms to American Conference of Governmental Industrial Hygienists standard "Industrial Ventilation: A Manual of Recommended Practice for Design".

Internal combustion engine

80. Where mobile equipment powered by an internal combustion engine is operated indoors or in an enclosed work area, the employer

with control over the workplace at which it is operated shall ensure that the engine is maintained in a manner that ensures conformity with the requirements of American Conference of Governmental Industrial Hygienists standard "Industrial Ventilation: A Manual of Recommended Practice for Design" relating to vehicle exhaust ventilation.

PART XVII
STRUCTURAL SAFETY

Movement within workplace

81. An employer shall ensure, to the extent feasible, that all persons at each workplace under its control that is a marine installation or structure are able to move around the workplace, including through corridors, without bending, sidling or tripping and shall ensure that any changes in floor elevation and ceiling height that pose a risk of injury and cannot be eliminated are clearly marked.

Doors

82. An employer shall ensure, at each workplace under its control that is a marine installation or structure, that

(a) any swinging door that opens onto a stairway does so over a floor or landing that extends under the full swing of the door; and

(b) the use of any double-action swinging door that does not permit persons approaching from one side of the door to be aware of persons on the other side is restricted to a single direction.

Guard-rails

83. Any guard-rail that is required under these regulations shall

(a) include

(i) a horizontal rail, cable or chain positioned not less than 90 centimetres and not more than 1.1 metres above the working surface,

(ii) unless the guard-rail is located at the top of a fixed ladder, one or more additional horizontal rails, cables or chains positioned below the one referred to in subparagraph (i) so that the distance between the working surface and the nearest rail, cable or chain or between any 2 adjacent rails, cables or chains does not

exceed half the distance between the working surface and the rail, cable or chain referred to in subparagraph (i), and

(iii) vertical supports spaced not more than 3 metres apart at their centres;

(b) be capable of withstanding the greater of

(i) the maximum load that is likely to be imposed on it, and

(ii) a static load of not less than 890 newtons applied in any direction at any point on the rail, cable or chain referred to in subparagraph (a)(i); and

(c) be capable of withstanding the effects of fire.

Wall and floor openings and open edges

84. An employer shall ensure that, in any area on a marine installation or structure under its control to which a person might have access,

(a) every opening in a wall, partition or bulkhead that measures at least 75 centimetres high and 30 centimetres wide and from which there is a drop of more than 1.2 metres, or that otherwise poses a hazard to any person, and every opening in a floor, platform or deck whose smallest dimension measures at least 30 centimetres is

(i) protected by a guard-rail, or

(ii) covered with material that is

(A) securely fastened to a supporting structural member of the marine installation or structure, and

(B) capable of withstanding all loads that are likely to be imposed on it; and

(b) every other open edge from which there is a drop of more than 1.2 metres, other than on a helicopter deck, is protected by a guard-rail.

Open-top enclosures

85. (1) An employer shall ensure, at each workplace under its control, that, where an employee has access to the top of a bin, hopper, tank, vat, pit or similar enclosure with an opening at the top that is large enough for a person to fit through,

(a) the enclosure's opening is covered with a grating, screen or other covering; or

(b) there is a walkway over or adjacent to the opening that is not less than 50 centimetres wide and is fitted with guard-rails.

(2) The grating, screen, covering or walkway shall be capable of supporting the greater of

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

(b) a live load of 6 kilonewtons.

(3) Where an employee is required to access the inside of an open-top enclosure from its top, the employer shall ensure, where feasible, that there is a fixed ladder on the inside wall of the enclosure that permits the employee to safely enter and exit.

Structural openings

86. An employer shall ensure, before any opening is made in the structure of a marine installation or structure under its control, including in any floor or wall, that the locations of all pipes, cable and conduits in the area where the opening is to be made are clearly marked.

PART XVIII
EQUIPMENT, MACHINES AND DEVICES

Requirements

87. (1) An operator and employer shall ensure, with respect to any equipment, machine or device that that operator or employer provides for use at a workplace, including any part of or accessory used with one of those things, that

(a) only a competent person installs, assembles, uses, handles, stores, adjusts, modifies, maintains, repairs, inspects, tests, cleans or dismantles it;

(b) the activities referred to in paragraph (a) are carried out in accordance with its manufacturer's instructions and, where

they are carried out outdoors, having regard to existing environmental conditions;

(c) the manufacturer's instructions respecting its operation and maintenance are made readily available to any person carrying out an activity referred to in paragraph (a);

(d) adequate space is provided around it to allow the activities referred to in paragraph (a) to be carried out safely;

(e) it is subject to

(i) a brief visual inspection before each use by the person using it, and

(ii) a thorough safety inspection at least once each year where

(A) its purpose is to preserve or protect life,

(B) its use would, in the absence of any hazard control measures, pose a risk to the health or safety of persons at the workplace, or

(C) it is subject to degradation over time that could affect its safety;

(f) any person who maintains, repairs, modifies, tests or inspects it, other than by carrying out a brief visual inspection, makes and signs a record that clearly identifies the equipment, machine or device, describes the activity carried out and provides the person's name, the date of the activity and, where applicable, the person's observations regarding the safety of the equipment, machine or device;

(g) a person does not use it in a manner that may compromise the health or safety of a person at the workplace, including by

(i) maintaining, repairing or cleaning any powered equipment, machine or device while it is operational, or

(ii) operating any equipment, machine or device that is equipped with a guard while the guard is not in its proper position; and

(h) a person does not intentionally tamper or interfere with it such that the health and safety of any person at the workplace could be compromised, including, unless done in accordance with these regulations, by impairing or rendering inoperative a safety device or system that is used with it.

(2) The operator or employer that provides the equipment, machine or device shall

(a) retain the records referred to in paragraph (1)(f), as well as a record setting out the date that they acquired the equipment, machine or device, until the day that is 5 years after the day on which the equipment, machine or device is taken out of service at the workplace; and

(b) ensure that those records are made readily available to any person who uses, inspects, tests, maintains, repairs or modifies the equipment, machine or device.

(3) Notwithstanding subparagraph (1)(g)(i), a person is permitted to maintain, repair or clean a powered piece of equipment, machine or device while it is operational where

(a) its continued operation is essential to the maintenance, repair or cleaning; and

(b) where feasible, the energy source for any of its parts whose operation is not essential is controlled in accordance with Part XXVII or those parts are equipped with guards.

(4) Notwithstanding subparagraph (1)(g)(ii), a person is permitted to operate any equipment, machine or device without its guard in the proper position where necessary to

(a) permit the release of any part of a person that is trapped in the equipment, machine or device; or

(b) test, maintain, repair or clean the equipment, machine or device where

(i) its energy source is, where feasible, controlled in accordance with Part XXVII, and

(ii) the person who performs the work does not leave the equipment, machine or device until the guard has been replaced and verified to be functioning properly.

(5) An employer shall establish, and shall instruct all employees to follow, procedures for minimizing the risk of injury where equipment, machines or devices at a workplace under the employer's control are required to be maintained, repaired, cleaned or tested while operational and without a guard in place and it is not feasible to control their energy source as described in paragraph (3)(b) or subparagraph (4)(b)(i).

Removal from service

88. An employer shall ensure that any equipment, machine or device at a workplace under its control that it has reason to doubt is safe for use is taken out of service and identified in a manner that ensures it is not inadvertently returned to service until a competent person determines it to be safe for use.

Hair, clothing and accessories

89. An employer shall ensure that all persons at each workplace under its control not wear long hair, loose-fitting clothing, dangling accessories, jewellery or other similar items unless those items are tied, covered or otherwise secured as necessary to prevent them from coming into contact with equipment or machines or from otherwise presenting a risk to health or safety.

Pedestrian passage

90. An employer shall ensure, at each workplace under its control, that a path for pedestrian use is clearly identified with floor markings or physical means through any area in which mobile equipment or other equipment that presents a risk of injury to persons passing through is being used.

Standards

91. (1) An employer shall ensure, in respect of each workplace under its control, that

(a) all equipment and machines conform to and are used in accordance with all applicable provisions of CSA Group standard Z432, "Safeguarding of machinery";

(b) the starting and stopping controls of all equipment and machines are located within easy reach of the person operating the equipment or machine;

(c) all access doors on equipment or machines that expose moving parts when opened are, where feasible, equipped with interlocks that

(i) prevent the access door from opening while the moving parts are in motion, or

(ii) immediately disconnect the power from the driving mechanism when the door is opened, causing the moving parts to stop and preventing them from restarting until the door is closed;

(d) all controls on equipment, machines and devices are

(i) clearly marked with their functions in a manner and location that ensures the markings remain visible to the person operating the equipment, machine or device, and

(ii) designed, positioned or shielded to prevent inadvertent activation;

(e) all insulated equipment and devices are protected against damage to their insulating material;

(f) all portable hand-held motor-operated electric tools conform to CSA Group standard C22.2 No. 60745, "Hand-Held Motor-Operated Electric Tools – Safety", or CSA Group standard C22.2 No. 62841, "Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety", as applicable;

(g) all powder-actuated fastening tools, fasteners and powder loads conform to and are used in accordance with ANSI/American Society of Safety Professionals (ASSP) standard A10.3, "Safety Requirements for Powder-Actuated Fastening Systems", except with respect to the required eye protection, which shall instead conform to paragraph 46(f);

(h) all power presses conform to and are used in accordance with CSA Group standard Z142, "Code for power press operation: Health, safety, and safeguarding requirements";

(i) all electric tools that plug into an electrical receptacle are grounded, unless they

(i) have a protective system of double insulation, or

(ii) are used in a location where reliable grounding cannot be obtained and are supplied from a double-insulated portable ground fault circuit interrupter of the class A type that conforms to CSA Group standard C22.2 No. 144, "Ground Fault Circuit Interrupters", on a 125-volt or 15-, 20- or 30-ampere circuit;

(j) all equipment, machines and devices that are a potential source of ignition are, where they are used in an area referred to in subsection 26(2), rated by their manufacturer as appropriate for use in such an area and used only with control measures in place to minimize the risk of fire or explosion;

(k) all hoses that contain a substance under pressure and that are connected to equipment or to a machine or device are equipped with restraining devices as necessary to prevent the hoses' hazardous movement, including in the event of accidental disconnection;

(l) all abrasive blasting or high-pressure washing machines have operating controls that

(i) are located near the nozzle,

(ii) are hand-operated, and

(iii) require continuous pressure by the person operating them to permit the flow of material;

(m) all abrasive wheels are

(i) inspected by a competent person and determined to be free from defects, cracks or other problems before being installed,

(ii) mounted between flanges,

(iii) used only on machines that are equipped with machine guards, including, in the case of a bench grinder, a wheel guard and a work rest or other device that, without making contact with the abrasive wheel, prevents the work piece from jamming between the abrasive wheel and the wheel guard, and

(iv) used only on machines whose number of revolutions per minute does not exceed the maximum speed rating of the abrasive wheel;

(n) all equipment and machines whose operation may cause the ejection of material that may pose a hazard to a person are, where feasible, equipped with a means of safely containing the material;

(o) all equipment and machines that have exposed moving, electrically charged or hot parts or that process, transport or handle material that constitutes a hazard are, where feasible, equipped with

(i) a guard that is not readily removable without the use of tools and that physically prevents persons from coming into contact with the parts or material or from being exposed to the hazard they present, or

(ii) where rendering the equipment or machine inoperative would minimize the hazard, a device that renders the equipment or machine inoperative where a person or their clothing comes into contact with or comes too close to a part of the equipment or machine that is likely to cause injury;

(p) all wire rope in tension, other than on a crane or hoist, is protected by a guard, where feasible; and

(q) where the workplace is a marine installation or structure, all temporary or portable heating equipment that is used in an enclosed area

(i) provides complete combustion of the fuel used in it or is equipped with an exhaust system that discharges the products of combustion outside the enclosed area, and

(ii) is used only while carbon monoxide levels in the enclosed area are being continuously monitored.

(2) Where it is not feasible for equipment or a machine to be equipped as described in paragraph (1)(c), (n) or (o), or for wire rope in tension to be protected as described in paragraph (1)(p), the employer shall ensure that another guard, safety device or awareness barrier is put in place to protect against the hazard.

Fuelling

92. (1) An employer shall ensure that equipment or a machine at a workplace under its control is not fuelled, and fuel is not transferred between containers,

(a) in the following locations:

(i) a place where the vapours from the fuel are not readily dissipated, or

(ii) the hold of a vessel or any other enclosed space at the workplace; or

(b) in the following circumstances:

(i) subject to subparagraph (ii), while there is any source of ignition in the vicinity that presents a risk of fire or explosion, or

(ii) in the case of equipment, while the equipment's engine is running, unless it is designed to be fuelled in that manner.

(2) Notwithstanding subparagraph (1)(a)(ii), equipment may be fuelled in the hold of a vessel or another enclosed space where

(a) an employee who has a suitable fire extinguisher ready for use is in the hold or space;

(b) no one other than the employee referred to in paragraph (a) and those employees engaged in the fuelling are in the hold or space;

(c) the fuelling is carried out by transferring fuel directly into the equipment's fuel tank or, in the case of liquefied gas, by replacing spent cylinders;

(d) no more fuel than is necessary to fill the equipment's fuel tank, or, in the case of liquefied gas, no more than the number of cylinders in need of replacement, is taken into the hold or space; and

(e) atmospheric gas levels in the hold or space are continuously monitored.

(3) An employer shall develop procedures to be followed respecting the fuelling of equipment to protect the health and safety of employees.

PART XIX
ELEVATORS AND PERSONNEL LIFTS

Standards

93. (1) An employer shall ensure that each elevator at a workplace under its control is designed, maintained, tested, inspected and used in accordance with ASME standard A17.1/CSA Group standard B44, "Safety code for elevators and escalators", and that each personnel lift at a workplace under its control is designed, installed, maintained, tested, inspected and used in accordance with CSA Group standard CAN/CSA-B311, "Safety Code for Manlifts".

(2) The employer shall ensure that every elevator and personnel lift is inspected and tested

(a) before the elevator or personnel lift is placed in or returned to service;

(b) after any alteration to the elevator or personnel lift; and

(c) at least once a year.

(3) An inspection ceases to be valid one year after the day on which it is carried out.

(4) The employer shall ensure that the person who inspects an elevator or personnel lift includes in the record referred to in paragraph 87(1)(f) the date on which the inspection ceases to be valid.

Elevator documentation

94. An employer shall ensure that a document is posted in each elevator at a workplace under its control that identifies the elevator and its location, indicates its capacity and sets out the date on which its most recent inspection ceases to be valid.

PART XX
LADDERS, STAIRS AND RAMPS

Application

95. This Part applies in respect of a workplace that is a marine installation or structure.

Ship's ladder

96. For the purposes of this Part, a reference to stairs includes a permanently installed structure, commonly known as a ship's ladder, that has a steep pitch, rigid treads supported by rigid side rails and a handrail on each side.

Requirement to install

97. Where an employee in the course of routine work is required to move between levels that are more than 45 centimetres apart, the employer with control over the workplace shall ensure that a fixed ladder, fixed stairs or a fixed ramp is installed between the levels.

Stairs, ramps and fixed ladders

98. (1) An employer shall ensure that all stairs, ramps and fixed ladders that are installed at each workplace under its control, as well as all cages, landings and platforms used with the fixed ladders, are designed and maintained to support any load that is likely to be imposed on them and to safely accommodate all persons who are likely to use them and all equipment that is likely to pass over them.

(2) Where stairs, a ramp or a fixed ladder end in direct proximity to anything that would pose a risk of injury to a person were they to inadvertently come into contact with it, the employer shall ensure that a barricade is installed to protect persons using the stairs, ramp or ladder from that hazard.

Temporary stairs

99. An employer shall ensure that all temporary stairs installed at a workplace under its control are securely fastened in place and have

(a) uniform steps in the same flight;

(b) a slope of not more than 1.2 to 1; and

(c) a hand rail not less than 90 centimetres and not more than 1.1 metres above the stair level

(i) on at least one side, and on every open side, where the stairs are not more than 1.12 metres wide, or

(ii) on both sides, where the stairs are more than 1.12 metres wide.

Ramps

100. An employer shall ensure that every ramp installed at a workplace under its control is

(a) securely fastened in place;

(b) braced where necessary to ensure its stability; and

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

Fixed ladders

101. (1) An employer shall ensure that any fixed ladder installed at a workplace under its control, other than one installed as part of a scaffold,

(a) is installed with its underside angled not less than 75 degrees and not more than 90 degrees from the ground;

(b) is securely held in place at the top and bottom and at intervals of not more than 3 metres;

(c) has rungs that are at least 15 centimetres from the wall, at uniformly spaced intervals of not more than 30 centimetres, and do not impede any employee from safely exiting the ladder onto a platform or landing;

(d) has side rails that extend not less than 90 centimetres above each landing or platform;

(e) is not coated with material that may hide flaws affecting its integrity;

(f) where it is more than 6 metres in length, is fitted, where feasible, with a protective cage for the portion of its length that is more than 2.5 metres above its bottom; and

(g) where it is more than 9 metres in length, is equipped with landings or platforms, at intervals of no more than 6 metres, that are

(i) at least 0.36 square metres in area, and

(ii) fitted at their outer edges with a guard-rail and toe board.

(2) While ascending or descending a fixed ladder at a workplace, an employee shall

(a) face the ladder;

(b) maintain a three-point contact with the ladder; and

(c) carry any tools, equipment or materials in a pouch or holster or in another secure manner.

(3) An employee shall not use a metal or wire-bound fixed ladder where there is a risk of it coming into contact with an energized electrical conductor or circuit part or with energized electrical equipment.

Portable ladders

102. (1) An employer shall ensure that any portable ladder used at a workplace under its control

(a) conforms to CSA Group standard Z11, "Portable ladders";

(b) has a minimum load rating of 113.4 kilograms;

(c) where used, other than as part of a scaffold system, on a marine installation or structure that is used for the drilling for or production of petroleum products, is made of a non-combustible material; and

(d) is not coated with material that may hide flaws affecting its integrity.

(2) An employee who uses a portable ladder at a workplace shall do so in accordance with CSA Group standard Z11, "Portable ladders", and shall ensure that, while the ladder is in use,

(a) it is placed on a firm and stable footing and positioned so that it is not necessary to use the underside;

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

(c) unless it is a self-supporting ladder, the upper portion of its side rails rests on a bearing surface capable of safely withstanding the load imposed on it.

(3) An employee shall not

(a) position a portable ladder in an elevator shaft or hoistway when that space is being used for hoisting;

(b) position a portable ladder near moving equipment that is under a load;

(c) use a portable ladder in a manner that may compromise its stability or the stability of any person on it; or

(d) use a metal or wire-bound portable ladder where there is a risk of it coming into contact with an energized electrical conductor or circuit part or with energized electrical equipment.

PART XXI
SCAFFOLDING AND PLATFORMS

Definition

103. In this Part, "elevating work platform" means a type of integral chassis aerial platform that has an adjustable position platform that is supported from ground level by an articulating or telescoping boom or by a vertically oriented, telescoping or elevating mast.

Use - general

104. (1) An employer shall ensure that an employee does not use a scaffold, suspended work platform or elevating work platform at a workplace under the employer's control unless

(a) the employer has authorized its use;

(b) the employee has been trained and instructed in its safe and proper use; and

(c) it has been inspected and certified by a competent person as being fit for the use to which the employee intends to put it.

(2) The employer shall ensure that an employee does not use a scaffold, suspended work platform or elevating work platform in environmental conditions that are likely to increase the risk to the health or safety of the employee unless its use in those conditions is necessary to remove a hazard or rescue a person.

Prevention of contact

105. The employer shall ensure that, where there is a risk of a person or equipment coming into contact with a scaffold, suspended work platform or elevating work platform in a manner that would pose a hazard, a barricade is installed or, where that is not feasible, another means of preventing the contact is provided.

Scaffolds

106. (1) An employer shall ensure, with respect to any scaffold used at a workplace under its control, that

(a) its configuration at the workplace is designed by a competent person;

(b) it is erected, used, inspected, dismantled and stored in accordance with CSA Group standard CAN/CSA-Z797, "Code of practice for access scaffold";

(c) where used to support a temporary floor or subjected to loads that could cause it to overturn, it is erected and used in accordance with written instructions approved by a professional engineer;

(d) either it is capable of supporting at least 4 times the load that is likely to be imposed on it or it has been approved by a professional engineer and consists of components that have been manufactured in accordance with a quality management system;

(e) its footings and supports are capable of supporting all static and dynamic loads that are likely to be imposed on them;

(f) to the extent feasible, it uses only manufactured platforms;

(g) its platforms or planks are adequately secured and installed in a manner that avoids gaps and overlapping;

(h) all of its wooden components are treated with a transparent fire retardant coating and are stored and maintained so that their integrity and fire retardant properties are preserved;

(i) all of its components are compatible with each other;

(j) where it is a continuous run scaffold or a double-pole tube and coupler scaffold, it has internal horizontal cross-bracing installed in the bay immediately adjacent to and at the level of a building tie, unless equivalent bracing is achieved using manufactured scaffold planks secured by end hooks to provide a fully decked work platform at that level; and

(k) any vertical ladder more than 9 metres in length that is used with it has a landing or platform at least every 6 metres.

(2) An employer shall ensure that a ladder jack scaffold is not used at a workplace under its control.

Elevating work platforms

107. An employer shall ensure, with respect to any elevating work platform at a workplace under its control, that

(a) its rated capacity is marked on it in a location that is clearly visible to any person using it;

(b) it is equipped with controls of a continuous pressure type that return to the neutral or stop position when released;

(c) it is equipped with an emergency stop device that is red in colour and located within easy reach of the person operating it;

(d) where its lifting mechanism creates a shear hazard to employees, that mechanism is adequately guarded or identified with signs, decals or similar markings warning of the hazard; and

(e) where it is self-propelled or mobile, it is used only with the approval of the chief safety officer.

PART XXII
FALL PROTECTION AND ROPE ACCESS

Risk of falling

108. The risk of a person falling from any of the following locations is a prescribed risk for the purpose of paragraph 201.17(2)(a) of the Act:

(a) 3 metres or more above the nearest safe surface or above water;

(b) any distance above a surface or thing that could cause injury or illness to the person; or

(c) a portable ladder where

(i) there are high wind or wave conditions,

(ii) the person is performing a task that does not permit them to maintain their centre of gravity between the ladder's side rails,

(iii) the person is performing a task that is not a light duty task, or

(iv) the person is performing a task for more than a short duration at any one location.

Means of protection

109. (1) An employer shall ensure that whichever of the following means of fall protection is most appropriate in the circumstances is provided whenever a person at a workplace under its control is in a location referred to in section 108:

(a) a guard-rail;

(b) temporary flooring;

(c) a travel restraint system that conforms to and has been selected in accordance with, and every component of which conforms to and has been selected in accordance with, all applicable CSA Group standards in the Z259 series;

(d) a fall-arrest system that conforms to and has been selected in accordance with, and every component of which conforms to and has been selected in accordance with, all applicable CSA Group standards in the Z259 series; or

(e) a safety net that, unless it is to be used in or around the helicopter landing deck area of a marine installation or structure, conforms to ANSI/American Society of Safety Professionals (ASSP) standard A10.11, "Safety Requirements for Personnel Nets" and has been installed, inspected and tested in accordance with that standard.

(2) An occupational health and safety program shall

(a) set out factors, including efficacy and feasibility, to be considered by the employer in determining the most appropriate means of fall protection for the purpose of subsection (1);

(b) address the assembly, maintenance, inspection, use and disassembly, as the case may be, of all means of fall protection provided and their components, including by establishing a schedule for their inspection; and

(c) where fall-arrest systems are to be provided at the workplace, address the risks associated with the potential for swing as a result of anchorage placement when a fall-arrest system is being used.

(3) Notwithstanding subsection (1) and paragraph (2)(a), the employer shall ensure that a fall-arrest system described in paragraph (1)(d) is provided to every person

(a) who is on a fixed ladder more than 6 metres in length;

(b) who is on an elevating work platform, as defined in section 103; or

(c) who uses a work-positioning system.

(4) The employer shall ensure that any means of protection referred to in paragraphs (1)(c) to (e) that it provides is used in accordance with the standards referred to in those paragraphs and, in

the case of a fall-arrest system provided to a person referred to in paragraph (3)(b), is secured to an anchorage point that is approved by the platform's manufacturer or a professional engineer.

(5) The employer shall ensure that any safety net provided

(a) is positioned as close as feasible to, and in any case no further than 4.6 metres below, the area from which there is a risk of a fall;

(b) extends at least 2.4 metres beyond that area on all sides or, where the area is a gangway, at least 1.8 metres beyond both sides;

(c) is positioned and maintained so that its maximum deflection does not permit any portion of a person who falls into it to come into contact with any other surface;

(d) is kept free of debris, obstructions or intervening objects that could be struck by a person falling into it; and

(e) is, where connected to another safety net, connected using splice joints that are at least as strong as the weakest of the nets.

(6) The employer shall ensure that

(a) all anchorages used in a means of fall protection are capable of withstanding the following forces in any direction in which the force may be applied:

(i) 22 kilonewtons, in the case of non-engineered anchorages, and

(ii) twice the maximum arresting force anticipated, in the case of engineered anchorages;

(b) any self-retracting device used in a means of fall protection is

(i) anchored above the user's head, unless the manufacturer's instructions allow for a different anchorage location, and

(ii) used in a manner that

(A) minimizes the hazards of swinging, and

(B) limits the distance that a user who fell would drop to less than 1.2 metres; and

(c) any lanyard used in a fall-arrest system is equipped with an energy absorber, unless

(i) the lifeline used is self-retracting, or

(ii) the fall-arrest system is designed by a competent person to

(A) limit the free fall to less than 1.2 metres and the arresting force to less than 4 kilonewtons, and

(B) prevent the user from coming into contact with any unsafe surface.

Rope access

110. (1) Notwithstanding subsections 109(1), (3) and (4), an employer shall ensure that any rope access carried out at a workplace under its control, or by any of its employees at a workplace not under its control, conforms, subject to subsection (3), to the "IRATA International code of practice for industrial rope access", published by the Industrial Rope Access Trade Association.

(2) For the purpose of subsection (1), all recommendations in the code are mandatory, unless compliance with the measure is not feasible, in which case the employer shall demonstrate to the chief safety officer, before any non-conforming rope access is carried out, that other controls are in place to mitigate or eliminate the risk that the measure is intended to address.

(3) A requirement in the code to conform to a standard in respect of equipment is satisfied by instead conforming, as applicable, to

(a) CSA Group standard Z259.1, "Body belts and saddles for work positioning and travel restraint";

(b) CSA Group standard Z259.10, "Full body harnesses";

(c) CSA Group standard Z259.11, "Personal energy absorbers and lanyards";

(d) CSA Group standard Z259.12, "Connecting components for personal fall-arrest systems (PFAS)";

(e) European Committee for Standardization (CEN) standard EN 567, "Mountaineering equipment – Rope clamps – Safety requirements and test methods"; or

(f) European Committee for Standardization (CEN) standard EN 353-2, "Personal protective equipment against falls from a height – Part 2: Guided type fall arresters including a flexible anchor line".

(4) The personal protective equipment that an employer is required to provide to any of its employees, and to any other individual at a workplace under its control, who is engaged in rope access includes headwear that conforms to

(a) CSA Group standard Z94.1, "Industrial protective headwear – Performance, selection, care, and use";

(b) ANSI/International Safety Equipment Association (ISEA) standard Z89.1, "American National Standard for Industrial Head Protection"; or

(c) European Committee for Standardization (CEN) standard EN 12492, "Mountaineering equipment – Helmets for mountaineers – Safety requirements and test methods".

(5) In this section, "rope access" means the use of ropes, in combination with other devices, to get to or from a work area or to maintain one's position in a work area.

Work permit

111. A work permit is required for any activity at a workplace that requires the use of a fall-arrest system or travel restraint system.

Instruction and training

112. (1) The instruction and training that an employer shall provide to its employees and other individuals at a workplace under its control who are involved in activities requiring the use of a fall-arrest system or travel restraint system includes

(a) an overview of the provisions of all applicable health and safety legislation and standards that relate to fall protection, including those relating to the roles and responsibilities of workplace parties;

(b) training on the identification of fall hazards;

(c) an overview of the hierarchy of controls that may be used to minimize the risk of falling and of injury from a fall;

(d) training on the different means of fall protection and the most suitable application of each;

(e) instruction on selecting all relevant components of the fall-arrest system or travel restraint system, including connecting hardware;

(f) instruction on assessing and selecting specific anchors for use with the fall-arrest system or travel restraint system;

(g) training on the effects on the human body of a fall, including free fall and swing fall, and fall-arrest, which shall address maximum arresting force and the purpose of energy absorbers;

(h) instruction and training on the use, storage, maintenance and inspection, including pre-use inspection, of fall-arrest systems, travel restraint systems and their components, including practice in inspecting, fitting, adjusting and connecting the systems and components; and

(i) instruction and training on emergency response procedures to be used where a fall occurs, including practice in carrying them out.

(2) The instruction and training shall be provided

(a) before the work that requires the use of the fall-arrest system or travel restraint system begins; and

(b) at least once every 3 years.

PART XXIII
FALLING OBJECTS

Risk of injury

113. (1) The risk of injury from falling objects and material at the workplace, whether they are falling over or from a height, is a prescribed risk for the purpose of paragraph 201.17(2)(a) of the Act.

(2) An employer shall ensure, at each workplace under its control, that wherever there is a risk of objects or material falling from a raised work area onto a person below, a toe board or other solid or mesh panel that extends from the floor of the raised area to a sufficient height to prevent the objects or material from falling from the raised area is installed.

(3) Notwithstanding subsection (2), where the installation of a toe board or panel is not feasible, the employer shall ensure that

(a) the objects or material are fastened to something in a manner that would, if they were to fall, prevent them from reaching a person below;

(b) a safety net is positioned below the raised area to catch the objects or material; or

(c) the area below and adjacent to the raised area is barricaded so that a person may not enter it while work is underway.

PART XXIV
MATERIALS HANDLING

Definitions

114. In this Part

(a) "personnel transfer" means the transfer by crane of persons between a vessel and marine installation or structure, between vessels or between marine installations or structures; and

(b) "signaller" means a person who directs, by means of visual or auditory signals, the safe movement and operation of materials handling equipment.

Lifting risks

115. (1) The risks associated with the use of materials handling equipment, including to lift persons or things, are prescribed risks for

the purpose of paragraph 201.17(2)(a) of the Act and the occupational health and safety program in respect of a workplace at which materials handling equipment is to be used for lifting shall

(a) identify the types of lifts that are expected to be performed at the workplace;

(b) set out criteria for classifying lifts by risk level, including criteria relating to the type of lift, its complexity, its physical elements, the expertise of those involved in carrying it out and the environmental conditions in which it is carried out;

(c) set out procedures for the preparation and performance of lifts by type and risk level, including

(i) communication requirements among all persons involved in the lifts,

(ii) in the case of lifts of persons, the required use of personal protective equipment by the person being lifted, and

(iii) in the case of lifts of persons over the water, the availability of fast rescue boats;

(d) identify any operational limits on lifting operations and any environmental conditions, such as wind, sea state and temperature, that may affect those operations, including by reducing the load that the materials handling equipment is able to safely handle or support;

(e) set out procedures for the maintenance, inspection, testing, repair and replacement of lifting equipment, fixed pad eyes and loose lifting gear; and

(f) set out procedures for communicating the provisions of the program that relate to lifting operations to all persons who are involved in carrying them out and all other persons in the vicinity who may be affected by them.

(2) For the purpose of paragraph (1)(b), a personnel transfer shall not be classified as a low risk lift.

Work permit

116. A work permit is required for all lifts carried out at a workplace using materials handling equipment, except those classified under the occupational health and safety program as low risk.

Prohibitions

117. It is prohibited for

(a) an employee to use or attempt to use materials handling equipment at a workplace where they have reason to doubt they can do so safely; or

(b) a signaller to direct any movement of materials handling equipment that would pose a risk to the health or safety of any person.

Hazardous conditions

118. The employer shall ensure that a person does not use materials handling equipment at a workplace under its control in conditions in which that use presents a risk to the health or safety of any person unless necessary to prevent a greater risk to the health or safety of any person.

Manual handling

119. An employer shall ensure that, where the manual handling of any thing may be hazardous to the health or safety of an employee, including because of its weight, size, shape or toxicity, that thing is, to the extent feasible, handled only using materials handling equipment.

Rated capacity

120. (1) An employer shall ensure that a competent person who is independent of the operator and employer inspects and proof tests all materials handling equipment that is to be used at a workplace under the employer's control where

(a) the equipment is to be used at the workplace for the first time;

(b) repairs or modifications have been made to the equipment's load-carrying components;

(c) the equipment has been in contact with an electric arc or current; or

(d) there is any other reason to doubt that the rated capacity of the equipment that was most recently certified under

subsection (2) or the limitations that were most recently indicated under that subsection continue to be accurate, including as a result of damage sustained by the equipment or modifications made to it.

(2) The employer shall ensure that the competent person, on the basis of the inspection and proof test, certifies in writing the rated capacity of the equipment and indicates in writing any limitations that shall be imposed on its use having regard to environmental conditions.

Materials handling equipment

121. (1) An employer shall ensure, with respect to all materials handling equipment used at a workplace under its control, that

(a) the equipment is, to the extent feasible,

(i) designed and constructed to prevent the failure of any of its parts, and

(ii) equipped with safety devices that will ensure that any such failure does not result in a loss of control of the equipment or its load or in any other hazardous situation;

(b) the equipment is marked in a manner that identifies its manufacturer and model;

(c) the equipment's rated capacity, or, in the case of equipment that can be operated in a range of positions or configurations, the greatest of its rated capacities, is clearly marked on a permanent part of it, in a position where the mark can be easily read;

(d) where the equipment can be operated in a range of positions or configurations, a chart indicating the rated capacities across that range is posted within view of the person operating it;

(e) the equipment's use in existing environmental conditions, including wind, sea state and temperature, is continually assessed by the person operating it, having regard to the limitations indicated under subsection 120(2), to determine whether those conditions have reduced the load that the equipment is able to safely handle or support to below its

rated capacity and, if so, the extent to which the load has been reduced;

(f) the equipment is operated in accordance with its rated capacity or, where applicable, its reduced capacity as determined under paragraph (e);

(g) any braking, steering and other control systems with which the equipment is equipped can safely control and stop the load's movement;

(h) where the equipment is used for lifting, moving or positioning persons, it is equipped with at least 2 independent braking systems and a fail-safe control system;

(i) where the equipment is used for lifting, moving or positioning persons, it has, before its first use and after any repair or modification, been certified by a competent person who is independent of the operator and employer as being safe for that use, including in conjunction with any other equipment or device with which it is used;

(j) where the equipment is powered, it is equipped with

(i) an audible signalling device within easy reach of the person operating the equipment, and

(ii) an emergency stopping device that, when engaged, will immediately shut down and isolate the equipment and that is within easy reach of the person operating it as well as at any other location from which it is reasonably foreseeable that a person may need to stop the equipment;

(k) where operation of the equipment could result in a fire, it is equipped, in a location that is readily accessible to the person operating it, with firefighting equipment that is appropriate to all fire hazards that may arise;

(l) the equipment is designed and constructed, to the extent feasible, so that any vibration, jolting or other uneven movement of it will not cause injury to any person or impair

the ability of the person operating the equipment to control it;

(m) any glass in the equipment's doors, windows and other parts is of a type that will not shatter into dangerous pieces on impact;

(n) where the equipment is regularly used outdoors and has an operator's compartment or position that would expose the person operating it to an environmental condition that could be hazardous to their health or safety, the compartment or position is fitted with a roof or other structure that will protect the person from the environmental condition and is constructed from non-combustible or fire-resistant material;

(o) any hook with which the equipment is used or equipped has

(i) where it is used for lifting persons, a spring-loaded latch that is locked and pinned in the closed position before use to prevent the connecting shackle from dislodging from the hook, or

(ii) in any other case, a spring-loaded latch or other equally effective means of preventing the load from falling off the hook;

(p) any self-locking eye hooks with triggers with which the equipment is used or equipped are designed to prevent the trigger from being accidentally activated;

(q) where there is a risk that the person operating the equipment or a person being lifted, moved or positioned by it could be struck by an intruding, falling or flying object or a shifting load, it is equipped, where feasible, with a structure that is constructed from non-combustible or fire-resistant material and that will, under all foreseeable conditions, protect the person from that risk;

(r) any place on the equipment to which an employee requires regular access, including any operator's compartment or position, is equipped with a safe means of access and egress that

(i) does not require the employee to jump,

(ii) would permit the emergency evacuation and rescue of the employee, and

(iii) can accommodate the employee's body dimensions while they are wearing personal protective equipment;

(s) any item used in any operator's compartment or at any operator's position on the equipment provides an adequate range of adjustability to accommodate the person using it;

(t) the placement and design of any displays and controls on the equipment do not hinder or prevent the person operating the equipment from doing so safely;

(u) any pendant control with which the equipment is equipped is not hung or supported solely by its electrical wiring;

(v) any wire rope drum or sheave with which the equipment is equipped has a spooling device or other device to maintain the wire rope in the groove;

(w) all loads handled by the equipment are secured as necessary to prevent them from sliding or falling in a manner that would present a risk to the health or safety of any person;

(x) where the equipment is operated remotely, it is operated at a safe distance from the load being lifted;

(y) all tools, tool boxes, spare parts or other items carried on the equipment are securely stored;

(z) the equipment is not left unattended unless adequate measures have been taken to prevent it from moving;

(aa) where the person operating the equipment does not have a clear and unobstructed view of the load and the area in which it is being operated, including the area through which the load is being moved, that person is directed by a competent person designated by the employer as a signaller who

(i) is clearly recognizable as a signaller,

(ii) has a continuous view of the person operating the equipment and remains in that person's line of sight,

(iii) has a clear and unobstructed view of the load and the area in which the equipment is being operated, including the area through which the load is being moved, or, where that is not feasible, a continuous view of another signaller who has a clear and unobstructed view of, as the case may be, the load or the portions of the area that are not within the first signaller's view, and

(iv) has no duties other than signalling while the equipment under their direction is in motion;

(bb) any fuel tank, compressed gas cylinder or similar container containing a hazardous substance mounted on the equipment is

(i) located or protected so that it is not hazardous to the health or safety of any employee who operates or rides on the equipment,

(ii) connected to fuel overflow and vent pipes that are located to ensure that fuel spills and vapours

(A) cannot be ignited by hot exhaust pipes or other hot or sparking parts, and

(B) are not hazardous to the health or safety of any employee who operates or rides on the equipment, and

(iii) marked on its caps or covers as to its contents; and

(cc) the equipment is not used in an area in which it may come into contact with an electrical cable, pipe or other supply line, structure or other thing that could, where struck, constitute a hazard to the health or safety of persons unless the person operating the equipment and, where applicable, the signaller have been informed of

(i) the hazard and its location, and

(ii) the distance that shall be maintained to avoid accidental contact with the thing that constitutes the hazard.

(2) Notwithstanding paragraph (1)(f), the materials handling equipment may be used to handle a load in excess of its rated capacity or reduced capacity for the purposes of testing and inspection.

(3) Where the employer is unable to determine with reasonable certainty the location of the hazard referred to in paragraph (1)(cc) or the distance referred to in subparagraph (1)(cc)(ii), or where it is necessary for the materials handling equipment to be used in closer proximity than that distance, the materials handling equipment may be used in the area only where

(a) every electrical cable with which there is a risk of coming into contact is de-energized;

(b) every pipe or other supply line containing a hazardous substance with which there is a risk of coming into contact has been shut down and drained; and

(c) every other thing that could, where struck, pose a hazard is protected against impact from the equipment.

Cranes and hoists

122. (1) An employer shall ensure, with respect to each lift by a crane or hoist that is carried out at a workplace under its control, that

(a) a competent person inspects the load before the lift to ensure that it is adequately secured by means of appropriate loose lifting gear;

(b) tag lines or similar devices are used to control the load's swing unless their use poses a hazard to the safety of any person;

(c) the person operating the crane or hoist does not leave the load suspended from the equipment while they are not at the controls;

(d) the load is safely landed and stabilized before being detached; and

(e) only persons who are essential to the conduct, supervision or safety of the lift are, while it is in progress, in the area in which it is being carried out.

(2) For the purpose of paragraph (1)(e), the employer shall ensure that all approaches to the area in which the lift is being carried out are posted with universally recognized warning signs prohibiting access by unauthorized persons and are secured to prevent inadvertent access.

(3) A person who operates a crane or hoist shall not start a lift where a non-essential person is in the area in which the lift is being carried out.

(4) Where a non-essential person enters an area in which a lift is being carried out while a lift is in progress, the person operating the crane or hoist shall immediately take measures to mitigate the risk to all persons, discontinue the lift as soon as it is safe to do so and not resume the lift until the area is cleared of non-essential persons.

(5) An employer shall ensure that, when a helicopter is landing or taking off, any crane at a workplace under its control that could pose a physical or visual hazard to the helicopter or its crew remains stationary and, where feasible, has its boom stowed.

(6) An employer shall ensure that every offshore pedestal crane used at a workplace under its control

(a) is equipped with

(i) appropriate travel limiting devices for its boom, hoist, blocks and slewing mechanism,

(ii) a device for measuring and indicating the weight of its load,

(iii) a device for measuring and indicating its boom extension or load radius, where its rated capacity varies on that basis,

(iv) a device for accessing anemometer readings, where the load that it is able to safely handle or support is susceptible to being reduced by wind, and

(v) a gross overload protection system, where it is used to move persons or things to or from a supply vessel; and

(b) has posted conspicuously and, where feasible, inside the crane control cab, the location of all approved laydown areas and restricted areas, the limitations indicated under subsection 120(2) and the chart referred to in paragraph 121(1)(d).

(7) An employer shall ensure, with respect to any manually operated hoist used at a workplace under its control, that

(a) it is equipped with a mechanism to hold the load at the desired height; and

(b) where it is equipped with a crank handle and not equipped with automatic load brakes,

(i) it is equipped with a means of preventing the crank handle from slipping off the crank shaft while in use, and

(ii) a load is not lowered on it unless the crank handle has been removed from the shaft or the hoist has otherwise been designed to eliminate the risk of a person being struck by the handle.

Wire rope clips

123. An employer shall ensure that any wire rope clips used at a workplace under its control are

(a) of sufficient strength to withstand the full weight that the wire rope with which they are used is capable of supporting; and

(b) made from a material that is suitable for the environmental conditions to which they are exposed.

Mobile equipment

124. (1) An employer shall ensure, with respect to all mobile equipment that is used at a workplace under its control, that

(a) it is equipped with seat belts, a rear-view mirror and operating and warning lights;

(b) it is used only in areas in which the overhead and side clearances are sufficient to permit the equipment and its load to be manoeuvred safely;

(c) while it is in motion,

(i) a person does not get on or off it except in the case of an emergency, and

(ii) nothing is picked up from or placed on it unless expressly permitted by the manufacturer's instructions; and

(d) any load that is transported by it while raised or suspended is carried as close to the floor as feasible and, in any case, not in a manner that renders the equipment unstable.

(2) The employer shall ensure that mirrors are installed at all blind corners that may be taken by mobile equipment to permit the person operating that equipment to see any approaching person or equipment.

(3) Where mobile equipment is used on the deck of a marine installation or structure or on an elevated area, the employer shall ensure that guards sufficient to prevent the equipment from falling over the edge are installed at the edge of the deck or area.

(4) The employer shall ensure that

(a) any unitized load that is transported on a forklift projects a distance no greater than half the height of the load above the top of the fork carriage, back rest or back rest extension of the forklift; and

(b) a part of a load that is transported on a forklift and consists of loose objects does not project above the top of the fork carriage, back rest or back rest extension of the forklift.

Additional standards

125. (1) An employer shall ensure, at each workplace under its control, that

(a) the design, use, maintenance, inspection and testing of overhead, jib and gantry cranes, monorails and hoists

conform to CSA Group standard B167, "Overhead cranes, gantry cranes, monorails, hoists, and jib cranes";

(b) the design, construction, installation, use, maintenance and inspection of conveyors, cableways or other similar materials handling equipment conform to ASME standard B20.1, "Safety Standard for Conveyors and Related Equipment"; and

(c) the design, construction, use, maintenance and inspection of forklifts conform to CSA Group standard B335, "Safety standard for lift trucks".

(2) An employer shall ensure that the construction, use, maintenance, inspection and testing of all loose lifting gear used at a workplace under its control conforms to the following standards, as applicable:

(a) ASME standard B30.9, "Slings";

(b) ASME standard B30.10, "Hooks";

(c) ASME standard B30.20, "Below-the-Hook Lifting Devices"; and

(d) ASME standard B30.26, "Rigging Hardware".

Personnel transfer

126. (1) An employer shall ensure, with respect to every personnel transfer at, to or from a workplace under its control, that

(a) the loading and landing areas are clear of all obstacles;

(b) the personnel transfer device is raised and lowered, to the extent feasible, over water;

(c) there is continuous communication between both points of transfer;

(d) a fast rescue boat and crew are available nearby and prepared to launch where needed;

(e) each person assigned to plan, manage, participate in or supervise the personnel transfer has been trained or

instructed on the procedures applicable to their role in the transfer, including with respect to the use of any equipment;

(f) the personnel transfer device is

(i) non-collapsible,

(ii) made of corrosion-resistant material suitable for use in the environmental conditions in which it is used,

(iii) designed to be buoyant,

(iv) designed to protect the persons being transferred in it from falling and landing impact,

(v) designed to allow persons to ride securely inside of it, either standing or seated,

(vi) large enough to accommodate a person on a medical stretcher and one other person, and

(vii) used only for carriage of persons and, where designed for that purpose, their personal baggage; and

(g) the safety devices referred to in subparagraph 121(1)(a)(ii) with which the crane used to carry out the transfer is equipped include a retention device installed from above the load block to the upper master link of the sling assembly.

(2) An employer shall ensure that at least 2 personnel transfer devices that meet the requirements set out in paragraph (1)(f) are available at all times at each workplace under its control that is a marine installation or structure used for drilling or production or as a living accommodation.

(3) The personal protective equipment that an employer shall provide to a person who is being transferred by personnel transfer includes either a helicopter passenger transportation suit system that conforms to the "Airworthiness Manual" published by the federal Department of Transport or a properly fitted immersion suit that conforms to paragraph 46(b).

Signalling

127. (1) An employer shall ensure, before any materials handling equipment is used at a workplace under its control, that

(a) all persons at the workplace know the hand signal for "emergency stop"; and

(b) where the equipment is to be used in circumstances that will require the use of a signaller,

(i) a code of hand signals is established, and

(ii) every signaller and every person operating the equipment is instructed in the use of that code.

(2) A person who operates materials handling equipment at a workplace shall obey the signal for "emergency stop" given by any person.

(3) Where it is not feasible for a signaller to use hand signals to communicate to a person operating materials handling equipment, including due to the distance between them, the employer shall ensure that

(a) the signaller and the person operating the equipment are provided with a primary and backup telephone, radio or other device that provides the signaller with a continuous means of communicating with the person operating the equipment while the equipment is in use;

(b) any radio codes used by the signaller to communicate with the person operating the equipment are included in the code referred to in paragraph (1)(b); and

(c) where the signalling is to be done by means of a two-way radio system, it is operated on a dedicated radio channel.

(4) The employer shall ensure that a copy of the code referred to in paragraph (1)(b) is kept readily available for examination by all persons at the workplace.

(5) Any person who does not understand a direction given to them by a signaller shall consider it to be a direction to stop.

Inspection

128. (1) The competent person who carries out the thorough safety inspection referred to in subparagraph 87(1)(e)(ii) in respect of materials handling equipment shall be independent of the operator and the employer.

(2) An employer shall ensure, notwithstanding subparagraph 87(1)(e)(ii), that

(a) the thorough safety inspection referred to in that subparagraph is also carried out in respect of materials handling equipment

(i) before the equipment is used at the workplace for the first time,

(ii) before it is returned to service after repairs or modifications have been made to its load carrying components, and

(iii) before it is returned to service after being in contact with an electric arc or current; and

(b) all loose lifting gear, personnel transfer devices and safety devices that are used in conjunction with personnel transfer devices are subject to the thorough safety inspection referred to in that subparagraph at least once every 6 months.

(3) The employer shall implement, at each workplace under its control, a system that facilitates the identification of materials handling equipment that is due for inspection.

Instruction and training

129. The instruction and training that an employer shall provide to an employee who uses materials handling equipment in the course of their work includes instruction and training on the effects of environmental conditions on the equipment's safe and proper use.

PART XXV
CONFINED SPACES

Evaluation

130. (1) The risks to which a person in a confined space is exposed are prescribed risks for the purpose of paragraph 201.17(2)(a) of the

Act and an employer shall ensure that, before any work begins at a workplace under its control, a competent person evaluates the workplace and makes a record of all confined spaces in it.

(2) The employer shall ensure that each workplace is re-evaluated by a competent person at least once every 3 years, as well as on the creation or elimination of a confined space, and that the competent person records any changes in respect of the confined spaces at the workplace from the last evaluation.

(3) An employer shall ensure that each confined space at a workplace under its control, other than a confined space that has been made inaccessible with bolted blind flanges, is visibly identified at each point of access as

(a) being a confined space;

(b) being a space to which access is restricted to authorized persons; and

(c) containing a danger.

Occupational health and safety program

131. An occupational health and safety program shall, with respect to the various confined spaces at the workplace and the types of work that could be carried out in them,

(a) identify the personal protective equipment that is to be used or worn by employees in the confined space;

(b) set out measures to be taken to prevent the entanglement of lifelines and other equipment used by employees in the confined space;

(c) identify the atmospheric hazards that may be present in the confined space and the equipment to be used for atmospheric testing and monitoring in the confined space;

(d) address the calibration and testing of the equipment referred to in paragraph (c) and the appropriate frequency of atmospheric testing;

(e) set out a plan for responding to emergencies in the confined space that, among other things,

(i) identifies the situations that would trigger emergency response procedures,

(ii) identifies the equipment, including personal protective equipment, to be used or worn in carrying out those procedures,

(iii) sets out procedures for ensuring the immediate evacuation of the confined space when an alarm is activated or where there is any potentially hazardous change in the atmospheric concentration of a hazardous substance, oxygen or another flammable, explosive or combustible substance, and

(iv) sets out procedures for retrieving persons from the confined space, including alternate procedures that will ensure they can be retrieved safely where an obstruction or other condition makes the use of certain retrieval procedures or equipment unsafe for them or for those carrying out the retrieval;

(f) identify the means by which persons inside and outside the confined space are to communicate among themselves, including in an emergency;

(g) identify all resources necessary for ensuring the health and safety of employees in the confined space, including by setting out the manner of determining the number of attendants whose presence is necessary at the confined space;

(h) set out the manner in which persons designated under paragraph 133(1)(i) are to be notified of the time and location at which their assistance might be required; and

(i) provide for the regular conduct of emergency response drills and exercises.

Work permit

132. (1) A work permit is required for any occupation of a confined space at a workplace.

(2) In addition to the information that is required to be set out in a work permit under subsection 53(2), the following information shall be included in a work permit for the occupation of a confined space:

(a) the method of entering and exiting the confined space;

(b) the escape route from the confined space, which, where persons are required to use a self-contained breathing apparatus or airline respirator, shall allow for escape before the air supply is expected to be exhausted; and

(c) a record of all persons signing in and out of the confined space.

(3) A work permit for the occupation of a confined space ceases to be valid 12 hours after the most recent testing conducted under subsection 134(2).

(4) The employer shall ensure that a copy of the work permit is posted at every entrance to the confined space for the duration of its occupation and is updated as new information referred to in paragraph (2)(c) or paragraph 53(2)(i) becomes available.

Entry and occupation requirements

133. (1) An employer shall ensure that a person does not enter or remain in a confined space at a workplace under its control unless

(a) the person is knowledgeable about the provisions of the occupational health and safety program that pertain to confined spaces;

(b) the person is wearing a full body harness to facilitate their retrieval or, where wearing the harness would pose a greater risk to them than not wearing one, measures are in place to ensure that the person can be retrieved safely in accordance with the alternate procedures referred to in subparagraph 131(e)(iv);

(c) the opening to be used for entry into and exit from the confined space is sufficiently large to allow safe passage of persons wearing personal protective equipment;

(d) any mechanical and electrical equipment that is in the confined space but not required to carry out any work there is

(i) disconnected from its energy source, and

(ii) isolated, locked out and tagged in accordance with Part XXVII;

(e) all sources of ignition are eliminated, where a flammable, explosive or combustible substance is present in the confined space;

(f) any liquid in which a person may drown or free-flowing solid in which a person may become entrapped has been removed from the confined space;

(g) engineering controls are in place to prevent any inadvertent discharge from any source, including a pipe or other supply line, that may be hazardous to the health or safety of any person in the confined space;

(h) measures have been taken to ensure that, where an atmospheric hazard arises while the confined space is occupied, the confined space will be continuously ventilated;

(i) persons have been designated to respond to any emergency that may arise in the confined space and have been notified of the time and location at which their assistance may be required;

(j) sufficient equipment referred to in paragraph 131(a) and subparagraph 131(e)(ii) is provided as close as feasible to the entrance to the confined space for use by the persons referred to in paragraph (i); and

(k) a drill has been completed simulating an emergency rescue from the confined space.

(2) The engineering controls referred to in paragraph (1)(g) shall, with respect to a pipe containing a hazardous substance or a substance under pressure or at a high temperature, consist of a blank or blind in conjunction with valves or other blocking seals that are secured

in the closed position, using a positive mechanical device that is designed to resist being opened inadvertently, other than as a result of excessive force, to prevent the substance from reaching the blank or blind.

(3) The employer shall ensure that a pipe referred to in subsection (2) is clearly marked to indicate the location of the blank or blind and that the valves or seals are clearly marked as being closed.

(4) The employer shall ensure that adequate barriers are erected to prevent unauthorized entry to the confined space.

(5) An employer shall ensure that every person entering and exiting a confined space signs in and out.

Atmosphere

134. (1) An employer shall ensure, where feasible, in respect of every occupied confined space at a workplace under its control, and every area whose atmosphere may be affected by, or may affect, the atmosphere in an occupied confined space, that

(a) a person's exposure to a hazardous substance in the atmosphere does not exceed the threshold limit value for that substance, as adjusted where necessary to reflect the length of time the person is in the confined space or area, or the biological exposure index for that substance, without regard to any protection that may be afforded to the person through the use of personal protective equipment;

(b) the concentration of oxygen in the atmosphere is not less than 19.5 percent and not more than 22.5 percent; and

(c) the concentration of any other flammable, explosive or combustible substance in the atmosphere is less than 10 percent of its lower explosive limit.

(2) The employer shall ensure that a competent person conducts atmospheric testing, and records the results, at times and frequencies appropriate to the hazards in the atmosphere, including

(a) before each time the confined space becomes occupied, unless the atmosphere in the space was, while the space was unoccupied, continuously monitored for any accumulation of contaminants that could pose an immediate threat to life or

that could interfere with a person's ability to escape unaided from the space and that monitoring shows no irregularities;

(b) after any change in the work or to the confined space that may affect its atmosphere; and

(c) in any case, no less frequently than every 12 hours while the confined space remains occupied.

(3) The employer shall ensure that the competent person does not enter the confined space to carry out testing unless they have first carried out preliminary testing of its atmosphere from outside the space.

(4) In addition to the testing required under subsection (2), the employer shall ensure that the atmosphere in the confined space is continuously monitored for any accumulation of contaminants that could pose an immediate threat to life or that could interfere with a person's ability to escape unaided from the confined space and shall ensure that all persons in the space are alerted to any such accumulation with sufficient warning to be able to exit the space safely.

(5) Where it is not feasible to comply with subsection (1), the employer shall ensure that every person in the confined space who wears a full body harness in accordance with paragraph 133(1)(b) has securely attached to it a lifeline that is secured outside the confined space and is monitored and controlled by an attendant, unless the risk of using the lifeline would pose a greater risk to the person than not using it.

Attendants

135. (1) An employer shall ensure that attendants are stationed outside and near all entrances to each confined space at a workplace under its control while the space is occupied to

(a) maintain a record of all persons entering and exiting the confined space and communicate that information among themselves;

(b) maintain communication with and monitor the safety of persons in the confined space; and

(c) provide emergency assistance to persons in the confined space and summon additional assistance where needed.

(2) The employer shall ensure that attendants are provided with a means of communicating continuously with persons in the confined space, communicating with other attendants at the confined space and summoning additional assistance.

(3) Attendants shall not enter the confined space.

(4) The employer shall ensure that attendants are not assigned any duties beyond those referred to in subsection (1) while stationed outside a confined space.

(5) Where a single attendant is responsible for monitoring more than one entrance to a confined space, the employer shall ensure that they are stationed in the location that best allows them to perform their duties in respect of each of those entrances.

Instruction and training

136. (1) The instruction and training that an employer shall provide to employees whose work relates to confined spaces at a workplace under its control, including employees whose work involves entering, evaluating, attending at, supervising persons in or carrying out emergency response procedures in relation to a confined space, includes

(a) training on the legislation applicable to confined spaces, including as it pertains to rights and duties;

(b) training on the identification of confined spaces;

(c) training on and practice in the assessment of risks associated with confined spaces, including the particular risks of carrying out hot work in confined spaces;

(d) training on the issuance and use of work permits for the occupation of confined spaces;

(e) an overview of the operation of personal gas monitoring devices;

(f) training on atmospheric testing, including practice in selecting appropriate testing methods and equipment;

(g) training on methods to safely ventilate or remove unwanted substances from confined spaces;

(h) training on the measures required under paragraphs 133(1)(d) and (g) for isolating energy and substances;

(i) training on methods of emergency response; and

(j) training on and practice in the selection and use of appropriate personal protective equipment and rescue equipment in a confined space.

(2) The training required under subsection (1) shall be provided to every employee before the first time they do any work relating to confined spaces at the workplace and then at least once every 3 years.

(3) The employer shall also provide any employee who may be required to carry out emergency response procedures in relation to a confined space with training and instruction in

(a) appropriate emergency response procedures for that confined space; and

(b) first aid at a level appropriate to the types of situations that may arise in that confined space.

Completion of work

137. An employer shall ensure that, once work in a confined space at a workplace under its control is complete, a competent person verifies that all persons have left the confined space and all tools, equipment and other material not intended to remain in the confined space have been removed.

PART XXVI
HOT WORK

Risks

138. The risks arising from hot work are prescribed risks for the purpose of paragraph 201.17(2)(a) of the Act.

Work permit

139. (1) A work permit is required for all hot work carried out at a workplace.

(2) The circumstances referred to in paragraph 53(2)(e) that shall be set out in the work permit include

(a) the location where the hot work is to be carried out, in particular, relative to any areas referred to in subsection 26(2);

(b) the presence of any flammable, explosive or combustible material; and

(c) the presence of any material that could produce toxic or flammable vapours.

(3) The work procedures referred to in paragraph 53(2)(f) that shall be set out in the work permit shall identify, among other things, the tools and equipment to be used in carrying out the hot work.

Requirements

140. (1) An employer shall ensure that hot work is not carried out at a workplace under its control unless

(a) the atmosphere in the work area and any adjacent area that may be affected by the hot work is continuously monitored for flammable, explosive or combustible substances, where there is a risk of them being present in those areas, and all persons in those areas are alerted where there is a risk of any of those substances being present in concentrations exceeding the values referred to in paragraphs (b) and (c);

(b) the atmospheric concentration of oxygen is less than 22.5 percent;

(c) the atmospheric concentration of any other flammable, explosive or combustible substance is less than 5 percent of its lower explosive limit;

(d) all potential sources of flammable, explosive or combustible substances have been identified, isolated and locked out;

(e) the work area and any adjacent area that may be affected by the hot work are free of all materials that could produce a toxic, flammable, explosive or combustible vapour when heated;

(f) a competent person maintains a fire watch patrol; and

(g) firefighting equipment appropriate to all fire hazards that may arise is readily accessible.

(2) The employer shall ensure that welding, cutting and allied processes are carried out, to the extent feasible, in accordance with the requirements set out in CSA Group standard W117.2, "Safety in welding, cutting, and allied processes".

(3) The employer shall ensure that, where gas is used in the carrying out of hot work,

(a) all hose lines or pipes that convey gases to the burner, and all couplings, are clearly identified to ensure they are not interchanged;

(b) only standard fittings are used and those fittings, as well as any regulator or automatic reducing valve on the equipment being used, are designed for the gas being used;

(c) safety devices that prevent the reverse flow of fuel, gas, oxygen or air from the torch end of the equipment being used to the supply lines and that prevent a flame from burning back from the torch end into the supply lines are used;

(d) all gas cylinders, piping and fittings are located to prevent them from being damaged or are otherwise protected against damage;

(e) all regulators and associated flexible connecting hoses are tested for leaks, using a substance that is not oil-based, fat-based or grease-based, immediately after being connected to a gas cylinder or other gas supply;

(f) while the hot work is being carried out, a person is stationed in a location that allows them to immediately cut off the gas supply in an emergency;

(g) the gas supply is immediately cut off where a leak is detected during the test referred to in paragraph (e) or during the hot work and no further work is carried out until the leak has been repaired and another test has been carried out to verify the success of the repair;

(h) all parts of the equipment being used are free from defects, leaks, oil and grease;

(i) the torch is ignited only with a device that is designed for that purpose; and

(j) hot metal parts and electrode stubs are disposed of or otherwise dealt with when not in use in a manner that dissipates heat and minimizes the potential for ignition and fire.

PART XXVII
HAZARDOUS ENERGY

Definitions

141. In this Part

(a) "electrical hazard" means a danger of electric shock, arc flash burn, thermal burn or blast injury resulting from contact with electrical equipment or failure of that equipment;

(b) "hazardous energy" means any energy that can harm a person;

(c) "limited approach boundary" means

(i) in respect of an exposed energized electrical conductor,

(A) where it is part of an alternating current system, the distance set out in column 2 of Schedule A that corresponds to the conductor's voltage in column 1, and

(B) where it is part of a direct current system, the distance set out in column 2 of Schedule B that corresponds to the conductor's voltage in column 1, and

(ii) in respect of an exposed energized circuit part,

(A) where it is part of an alternating current system, the distance set out in column 3 of Schedule A that corresponds to the part's voltage in column 1, and

(B) where it is part of a direct current system, the distance set out in column 3 of Schedule B that corresponds to the part's voltage in column 1; and

(d) "restricted approach boundary" means, in respect of an exposed energized electrical conductor or circuit part,

(i) where it is part of an alternating current system, the distance set out in column 4 of Schedule A that corresponds to the conductor's or part's voltage in column 1, and

(ii) where it is part of a direct current system, the distance set out in column 4 of Schedule B that corresponds to the conductor's or part's voltage in column 1.

Occupational health and safety program

142. Exposure to hazardous energy, including as a result of the unexpected start-up of any equipment, machine, device or system or as a result of contact with or a failure of electrical equipment, is a prescribed risk for the purpose of paragraph 201.17(2)(a) of the Act and an occupational health and safety program shall

(a) set out, for each piece of equipment, machine, device and system at the workplace that may present such a risk,

(i) the nomenclature by which it is to be identified, which shall be consistent with any associated design documents,

(ii) detailed procedures for de-energizing it and isolating its energy source using an energy-isolating device at all possible locations, both local and remote, and

(iii) detailed procedures for verifying and testing that the de-energization and isolation are complete;

(b) set out detailed procedures for securing and removing lockout devices and for affixing tags or signs to those devices;

(c) set out the method by which persons in the vicinity of any equipment, machine, device or system are to be notified of its lockout;

(d) set out procedures for the orderly transfer of control of lockout devices between outgoing and incoming employees during shift or personnel changes;

(e) set out measures for ensuring that, before any equipment, machine, device or system that has been locked out is re-energized, all persons are clear of, and have been instructed to remain clear of, the area in which they would be at risk of exposure to hazardous energy;

(f) set out procedures for the inspection and testing of electrical equipment and circuits, including the selection of appropriate testing equipment, having regard to the electrical code to which the workplace is designed;

(g) set out procedures for maintaining the integrity of any electrical equipment's insulation and its enclosure;

(h) set out procedures for all work involving hazardous energy, including in relation to

(i) the selection of appropriate tools,

(ii) the use of personal protective equipment and other protective devices, and

(iii) communication with persons in the vicinity of the location where the work is being carried out to ensure the safe coordination of the work with other activities;

(i) identify the limited approach boundaries and restricted approach boundaries that apply to all locations at the workplace where shock hazards exist;

(j) identify the arc flash boundary for every piece of electrical equipment at the workplace that gives rise to an arc flash hazard;

(k) address the number of persons, including electrical safety watchers, needed to safely carry out electrical work and the competencies those persons are required to meet;

(l) set out procedures for carrying out work involving multiple power systems, where applicable;

(m) set out procedures for responding to emergencies involving hazardous energy, including with respect to the use of emergency equipment; and

(n) address precautions to be taken with respect to battery rooms.

Work permit

143. A work permit is required for all work at a workplace that presents a risk of exposing any person to hazardous energy, including any work carried out closer to an exposed energized electrical conductor or circuit part than the applicable limited approach boundary or restricted approach boundary.

Employer obligations

144. (1) An employer shall ensure, at each workplace under its control, that

(a) hazardous energy is controlled in accordance with CSA Group standard Z460, "Control of hazardous energy — Lockout and other methods";

(b) every energy-isolating device is

(i) designed and located to permit its quick and safe operation at all times, and

(ii) marked to identify, in the manner referred to in subparagraph 142(a)(i), the equipment, machine, device or system whose energy source it isolates;

(c) lockout devices and locks for securing them are readily available to employees who may need to carry out a lockout;

(d) every lock used to secure a lockout device is

(i) marked with a unique identification number, and

(ii) openable only with a unique key;

(e) a lockout device is not secured on an energy-isolating device in a manner that prevents access to any other energy-isolating device;

(f) an employee who secures a lockout device affixes to it a tag or sign containing only the following information:

(i) the equipment, machine, device or system whose energy source has been isolated and the type of energy that has been isolated,

(ii) words or a symbol prohibiting any person from starting or operating the equipment, machine, device or system,

(iii) the date and time of the lockout,

(iv) the name of the employee who secured the lockout device, and

(v) the reason for the lockout;

(g) a tag or sign is not removed from a lockout device by anyone other than the employee who affixed it or to whom control of the device has been transferred in accordance with the procedures referred to in paragraph 142(d);

(h) any equipment, machine, device or system that has been locked out is inspected before being returned to service;

(i) all electrical equipment is adequately guarded, insulated and, subject to paragraph 91(1)(i), grounded to prevent electrical hazards;

(j) all grounded electrical equipment that plugs into an electrical receptacle meets the following requirements:

(i) its cord, if any, contains a grounding conductor,

(ii) its plug and the receptacle into which the plug is inserted are not

(A) connected or altered in a manner that might interrupt the continuity of the grounding conductor, or

(B) altered to allow for use in a manner not intended by the manufacturer, and

(iii) it is not used with an adapter that would interrupt the continuity of the grounding conductor;

(k) work is not carried out on electrical equipment while it is energized unless necessary due to equipment design or operational limitations;

(l) a competent person identifies, using an arc flash analysis, all electrical equipment that poses an arc flash hazard and that equipment has affixed to it a warning label setting out the date of the analysis and the following information reflecting the analysis:

(i) the equipment's nominal voltage,

(ii) the arc flash boundary for the equipment, and

(iii) an indication of

(A) the available incident energy and corresponding working distance in respect of the equipment,

(B) the arc flash category of personal protective equipment that shall be used with the equipment,

(C) the minimum arc rating of personal protective equipment that shall be used with the equipment, or

(D) the site-specific level of personal protective equipment that shall be used with the equipment;

(m) only the following persons work on energized electrical equipment used for the generation or distribution of electricity or install, repair, alter or test electrical equipment:

(i) a person who is certified as an electrician under the laws of a province,

(ii) a person who has qualifications from a jurisdiction outside of Canada equivalent to those of a person referred to in subparagraph (i), and

(iii) a person who is undergoing on-the-job training under the direct supervision of a person referred to in subparagraph (i) for the purpose of becoming such a person and who has demonstrated an ability to perform tasks safely at their level of training;

(n) electrical equipment is installed in a location that minimizes risk to the safety of persons and in a manner that protects the equipment from mechanical and other damage;

(o) the working space around and the path of access to every electrical switch, energy-isolating device or meter are free from obstruction and arranged to give authorized persons ready access to them;

(p) electrical rooms are not used for storing flammable, explosive or combustible materials or materials that are unrelated to electrical work;

(q) volatile flammable substances are not used in any electrical room or other enclosed area through which high-voltage electrical current passes;

(r) all electrical equipment that is used in an area referred to in subsection 26(2) has been certified by a competent person who is independent of the operator, employer and manufacturer as being safe for use in such an area;

(s) any electrical receptacle or extension cord that is used in an area referred to in subsection 26(2) is equipped with a terminal that interrupts the circuit before a connecting device is withdrawn;

(t) all electrical receptacles that may be exposed to weather are weatherproof;

(u) all electrical receptacles in an area in which persons may be exposed to water, including within 1.5 metres of faucets and showers, are designed or equipped to prevent ground faults;

(v) precautions are taken to prevent a plug from being inserted into an electrical receptacle of the incorrect voltage;

(w) electrical drawings, produced by a competent person and containing line diagrams indicating the position and voltage rating of all electrical components at the workplace, are made readily available to all persons at the workplace and are updated after any repair or alteration to the electrical system;

(x) legible warning signs, written in the official operating language of the workplace with symbols to convey the same meaning, are posted wherever an electrical hazard exists; and

(y) a non-conductive rescue hook is kept readily available for use wherever a person is carrying out work that may expose them to a shock hazard.

(2) Where the energy source being isolated is electric, the tag or sign referred to in paragraph (1)(f) shall be made of non-conductive material.

(3) The employer shall ensure that

(a) an energy-isolating device used on a pipe that contains a substance that may release hazardous energy, other than in a confined space,

(i) consists of a blank or blind in conjunction with valves or other blocking seals that are secured and locked out in the closed position to prevent the substance from reaching the blank or blind,

(ii) consists of a double block and bleed system consisting of 2 valves or other blocking seals that are secured and locked out in the closed position and located on each side of a valve or other mechanism that is secured and

locked out in the open position to allow for bleed-off between the 2 seals, or

(iii) has been approved by a professional engineer;

(b) the location of any blank or blind referred to in subparagraph (a)(i) is clearly marked on the pipe;

(c) all valves or other seals or mechanisms referred to in subparagraph (a)(i) or (ii) are clearly marked to indicate the position they are in; and

(d) any energy-isolating device referred to in subparagraph (a)(ii) or (iii) is monitored for leaks.

(4) The employer shall ensure that electrical equipment that is taken out of service under section 88 is de-energized until a competent person determines it to be safe for use.

Approach boundaries

145. (1) An employer shall ensure that a person at a workplace under its control is not closer to an exposed energized electrical conductor or circuit part than

(a) the applicable restricted approach boundary, unless they are a person referred to in paragraph 144(1)(m); or

(b) the applicable limited approach boundary, unless they are a person referred to in paragraph 144(1)(m) or are accompanied by such a person.

(2) In any case, a person may not be closer to an exposed energized electrical conductor or circuit part than is necessary to carry out their work.

(3) Where a person is required to work closer to an exposed energized electrical conductor or circuit part than the applicable limited approach boundary but does not require access to the conductor or part, or where a person working outside that boundary is at risk of inadvertently moving within it, the employer shall ensure that

(a) temporary barriers that do not touch the equipment to which the conductor or circuit part belong are installed to prevent access to the conductor or part; and

(b) the work is constantly observed by an electrical safety watcher designated by the employer.

(4) Where a person is required to work closer to an exposed energized electrical conductor or circuit part than the applicable restricted approach boundary, or where a person working outside that boundary is at risk of inadvertently moving within it, the employer shall ensure that any tools and equipment that the person uses that could make contact with the electrical conductor or circuit part are insulated.

(5) An employer shall ensure that, where a person at a workplace under its control is required to work within an arc flash boundary identified under paragraph 142(j),

(a) that person has received training in the recognition and mitigation of arc flash hazards;

(b) that person wears arc-rated personal protective equipment that is selected having regard to the information set out on the label referred to in paragraph 144(1)(l); and

(c) the work is constantly observed by an electrical safety watcher designated by the employer.

(6) An employer shall ensure that any electrical safety watcher whom it designates for the purpose of paragraph (3)(b) or (5)(c)

(a) is knowledgeable of the hazards associated with the work;

(b) is trained in methods of release and rescue and has the equipment necessary for carrying them out, including all personal protective equipment necessary for their own health and safety;

(c) has first aid qualifications at least equivalent to a standard first aid certificate;

(d) is knowledgeable in the procedures to be followed to obtain medical and other emergency assistance and is provided with a means of summoning that assistance without delay;

(e) has the authority to immediately stop any part of the work that they consider dangerous;

(f) warns the persons carrying out the work of the hazards associated with it;

(g) remains in the area in which the work is being carried out for its duration;

(h) ensures that all safety precautions and procedures are complied with; and

(i) is free of any other duties that might interfere with their duties as a watcher.

PART XXVIII
COMPRESSED GAS

Hose lines

146. An employer shall ensure that all hose lines for conveying flammable gas or oxygen from supply piping or compressed gas cylinders to torches at a workplace under its control have threads that conform to Compressed Gas Association standard CGA V-1, "Standard for Compressed Gas Cylinder Valve Outlet and Inlet Connections".

Compressed gas cylinders

147. (1) An employer shall ensure that all compressed gas cylinders at a workplace under its control, and all equipment used with them, including regulators, automatic reducing valves, gauges and hose lines are compatible for use with one another, as indicated in the manufacturers' specifications.

(2) The employer shall ensure that equipment referred to in subsection (1) that is provided for use with a compressed gas cylinder containing a particular gas or group of gases is not used at a workplace under its control with a compressed gas cylinder containing a different gas, unless that use is approved by the persons who supplied the compressed gas cylinder and the equipment.

(3) The employer shall ensure, with respect to every compressed gas cylinder at a workplace under its control, that

(a) the cylinder's connections to piping, regulators and other components are kept sufficiently tight to prevent leakage; and

(b) the cylinder's valves are kept closed at all times unless

(i) gas is flowing from the cylinder,

(ii) the gas in the cylinder is maintaining pressure in a supply line, or

(iii) the cylinder is on standby during and between operations using gas and is not left unattended.

Portable compressed gas cylinders

148. (1) An employer shall ensure that all portable compressed gas cylinders at a workplace under its control

(a) are not

(i) rolled on their sides,

(ii) subjected to rough handling, or

(iii) moved using a lifting magnet or sling;

(b) are protected from

(i) exposure to corrosive materials or corrosion-aiding substances,

(ii) exposure to excessive heat or fire, and

(iii) falling and impact;

(c) where they are not equipped with appropriate lifting mechanisms, are lifted only while held by a suitable cradle, platform or other device;

(d) are transported in a manner that will prevent damage to them and their components, including by

(i) being fastened securely in an upright position, unless designed for transport in another orientation, and

(ii) having in place a protective cap or other means of preventing damage to their valves; and

(e) are stored

(i) securely in place, using securing devices capable of withstanding a fire,

(ii) in a well-ventilated storage area where the cylinders are not exposed to temperature extremes, in accordance with the specifications of the cylinder manufacturer and the person who supplied the gas,

(iii) with the cylinders grouped by type of gas and the groups arranged having regard to the gases they contain,

(iv) with full and empty cylinders separated,

(v) at a safe distance from all operations that produce flames, sparks or molten metal or that would result in excessive heating of the cylinder, and

(vi) with all protective devices with which they are equipped in place.

(2) The employer shall ensure that signs are posted in a conspicuous place in each storage area in which portable compressed gas cylinders are stored, indicating the names of the gases stored.

PART XXIX
ABRASIVE BLASTING AND HIGH-PRESSURE WASHING

Employer obligations

149. (1) The risks associated with abrasive blasting, high-pressure washing or any similar operation are prescribed risks for the purpose of paragraph 201.17(2)(a) of the Act and an employer shall, where such an operation is carried out at a workplace under its control, ensure that

(a) every enclosure and other work area in which the operation is carried out is identified by warning signs or similar means;

(b) only employees who are necessary for the operation are permitted in the enclosure or other work area in which the operation is carried out; and

(c) every enclosure is provided with exhaust ventilation and makeup air to reduce the exposure of persons inside the enclosure, where applicable, to air contaminants and prevent the uncontrolled release of air contaminants from the enclosure.

(2) For the purpose of subsection (1), "enclosure" means a temporarily or permanently contained work area in which abrasive blasting, high-pressure washing or any similar operation is carried out, and includes an unoccupied contained work area in which such an operation is carried out by a person located outside that area.

PART XXX
EXPLOSIVES

Definition

150. In this Part, "activity involving an explosive" includes the storage, handling, transportation, preparation or use of an explosive.

Occupational health and safety program

151. The risks associated with the carrying out of activities involving an explosive are prescribed risks for the purpose of paragraph 201.17(2)(a) of the Act and the occupational health and safety program in respect of a workplace at which those activities may be carried out shall

(a) address the designation of areas in which those activities may be carried out;

(b) set out procedures respecting

(i) the loading and recovery of explosives, including measures to be taken prior to loading and recovery to address stray electrical energy and radiofrequency,

(ii) the secure storage of explosives, including their protection from heat, impact and electrical charge,

(iii) the selection and use of appropriate tools, including non-sparking tools,

(iv) the management of misfires, and

(v) the disposal of waste explosive materials; and

(c) address the possible effects of weather conditions on the activities.

Work permit

152. A work permit is required for any activity involving an explosive that is carried out at a workplace.

Employer obligations

153. (1) An employer shall ensure, with respect to each workplace under its control, that

(a) only competent persons designated by the employer are involved in any activity involving an explosive or have access to explosives;

(b) only persons who are directly involved in the activity are permitted in the area in which it is carried out;

(c) the quantity of explosives stored at the workplace is kept to a minimum and does not, in any event, exceed 75 kilograms unless otherwise authorized by the chief safety officer;

(d) detonators are not stored with any other explosive other than a detonator of the same type;

(e) containers in which explosives are stored are

(i) constructed to safely contain the explosives during all potential emergencies, or

(ii) constructed and located in a manner that allows them to be safely jettisoned in an emergency; and

(f) a competent person maintains and keeps in a readily accessible location a register of all explosives stored, removed from storage, used, misfired, destroyed or transferred outside the workplace, setting out

(i) the competent person's name,

(ii) the name of the person who stored, removed, used, destroyed or transferred the explosive,

(iii) the date of the storage, removal, use, destruction or transfer,

(iv) the type and amount of explosive stored, removed, used, misfired, destroyed or transferred, and

(v) particulars of the explosive's use, intended use, destruction or transfer.

(2) The employer shall retain the register referred to in paragraph (1)(f) for at least 2 years after the last day on which information is recorded in it.

PART XXXI
HAZARDOUS SUBSTANCES

Definitions

154. In this Part

(a) "fugitive emission" means a hazardous product in any form that escapes into the workplace from processing equipment, emission control equipment or a product;

(b) "hazardous waste" means a hazardous product that is intended to be recycled, recovered or disposed of; and

(c) "product identifier" means, in respect of a hazardous substance, including a hazardous product, its brand name, chemical name, common name, generic name or trade name.

Occupational health and safety program

155. (1) Exposure to hazardous substances is a prescribed risk for the purpose of paragraph 201.17(2)(a) of the Act and the associated control measures set out in the occupational health and safety program shall be commensurate to the risks associated with each hazardous substance present at the workplace.

(2) An occupational health and safety program shall set out procedures for

(a) managing the introduction of new hazardous substances into the workplace;

(b) identifying and substituting, to the extent feasible, non-hazardous or less hazardous substances for more hazardous substances used at the workplace;

(c) ensuring that all safety data sheets and other documents containing hazard information with respect to hazardous substances at the workplace are kept up to date;

(d) developing and implementing any medical monitoring program that may be required under paragraph 156(1)(c);

(e) identifying and implementing means, potentially including protective reassignment, of eliminating all workplace exposure to a respiratory sensitizer or skin sensitizer, as those terms are defined in section 8.4 of the *Hazardous Products Regulations* (Canada), for any employee who is or is likely to be sensitized to that substance;

(f) informing employees of the hazards posed by any substance that is a germ cell mutagen, as defined in section 8.5 of the *Hazardous Products Regulations* (Canada), or toxic to reproduction, as defined in section 8.7 of those regulations, to which they may be exposed at the workplace; and

(g) determining levels of safe exposure to the substances referred to in paragraph (f) for persons who are pregnant or breastfeeding or intend to conceive a child and identifying and implementing means, potentially including protective reassignment, of ensuring that those levels are not exceeded in respect of any employee who has advised the employer that they are such a person.

Investigation and assessment

156. (1) The employer shall, for the purpose of investigating and assessing potential exposure to hazardous substances under paragraph 201.19(f) of the Act, before the work that gives rise to the potential exposure begins,

(a) obtain from a competent person designated by it, in consultation with the workplace committee or coordinator, as the case may be, a signed written report that

(i) addresses the following factors in respect of each hazardous substance to which employees may be exposed:

(A) the substance's chemical, biological and physical properties,

(B) the routes of exposure to the substance,

(C) the acute and chronic effects on health of exposure to the substance,

(D) the manner in which the substance is produced, stored, used, handled and disposed of at the workplace,

(E) the control methods used to eliminate or reduce the employees' exposure to the substance, and

(F) the quantity, concentration or level of substance to which the employees may be exposed, including, in the case of an airborne chemical agent, whether that concentration is likely to exceed 50 percent of the threshold limit value for that agent referred to in paragraph 157(1)(a), and

(ii) sets out the competent person's recommendations regarding compliance with the provisions of the Act and these regulations respecting hazardous substances, including recommendations in respect of sampling, testing and medical examinations of employees;

(b) where the report referred to in paragraph (a) recommends the medical examination of employees,

(i) obtain from a physician with specialized knowledge of the hazardous substance to which the employees may be exposed a written opinion, to be retained with the report, as to whether the medical examination is necessary, and

(ii) where it is confirmed that the examination is necessary, obtain the results of a medical examination of each employee, carried out by a physician acceptable to that employee and at the employer's expense, indicating whether the employee is fit to be exposed to the substance and, if so, any restrictions that ought to be imposed on their exposure; and

(c) assess whether and to what extent medical monitoring of employees is necessary and, where the employer determines that it is necessary, or where requested by the board under paragraph 201.63(1)(f) of the Act, implement a program for the medical monitoring of the employees.

(2) Where 2 or more hazardous substances have a similar toxicological effect on the same target organ or system, their combined effect shall be considered for the purpose of the investigation and assessment, using the additive mixture formula set out in the American Conference of Governmental Industrial Hygienists publication "TLVs and BEIs: Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices".

(3) Where it is likely that the concentration of an airborne chemical agent referred to in clause (1)(a)(i)(F) exceeds the threshold limit value for that agent referred to in paragraph 157(1)(a), the concentration shall be determined using a test that conforms to the United States National Institute for Occupational Safety and Health's "NIOSH Manual of Analytical Methods", where such a test exists for that agent.

Employer obligations

157. (1) An employer shall ensure, in respect of each workplace under its control, that

(a) an employee's exposure to a hazardous substance does not exceed the threshold limit value for that substance, as adjusted where necessary to reflect the length of the employee's work period, or the biological exposure index for that substance;

(b) automated detection and warning systems are in place, where feasible, to alert employees of any potential exposure to a hazardous substance;

(c) hazardous substances are stored

(i) in an area, designated by the employer for that purpose, that is

(A) designed and constructed to provide for the safe containment and protection of its contents,

(B) clearly identified by appropriate signage,

(C) designed and maintained, including through the provision of adequate ventilation and lighting, to allow for its safe occupancy and the safe movement of employees, equipment and material, and

(D) designed and equipped to permit effective emergency response having regard to the nature of each substance being stored, including, where any of the substances is flammable or combustible, by being equipped with a suitable fire suppression system,

(ii) in containers that are designed and constructed to protect persons from the substances' hazardous effects, and

(iii) in a manner that ensures that

(A) the substances and their containers cannot readily fall, become dislodged, suffer damage or be exposed to extreme temperatures, and

(B) where the mixing of multiple substances would create a health or safety hazard to persons, those substances are prevented from mixing in the event of container leakage, breakage or other similar circumstance;

(d) any storage area designated under subparagraph (c)(i) in which a flammable or combustible substance is to be dispensed or transferred also meets the following criteria:

(i) its ventilation conforms to the applicable provisions of National Fire Protection Association publication NFPA 30, "Flammable and Combustible Liquids Code",

(ii) its exhaust air is discharged outdoors, to an area in which the exhaust will not pose a risk to the health or safety of any person, and the storage area is provided with makeup air,

(iii) any makeup air duct that passes through a fire separation is equipped with a fire damper that is fitted to close automatically on detection of fire or the arming of a related fire suppression system, and

(iv) any doors to or within the area are self-closing;

(e) hazardous substances are removed from storage and used in as small a quantity as is feasible;

(f) any hazard posed by a hazardous substance, including as a result of its production, storage, handling, use or disposal, is confined to as small an area as is feasible;

(g) signs warning of the presence of hazardous substances are posted in conspicuous places, including all access points to the area in which the substances are present;

(h) any production, storage, handling, use or disposal of a hazardous substance is done in accordance with the safety data sheet for that substance, if any, or another document containing hazard information in respect of that substance;

(i) any handling, storage or use of a hazardous substance that is at risk of igniting from static electricity conforms to the National Fire Protection Association publication NFPA 77, "Recommended Practice on Static Electricity";

(j) any words or symbols that identify the contents of a container as a hazardous substance are removed once the container has been completely cleaned of that substance;

(k) where an employee's skin, hair or clothing is likely to become contaminated by a hazardous substance in the course of their work,

(i) a shower is available to them, outside of the accommodations area, for the purpose of decontamination, and

(ii) they are allowed sufficient time during their normal working hours to use the decontamination shower or other cleaning facilities;

(l) appropriate emergency eye-wash stations and showers that conform to and have been installed in accordance with ANSI/International Safety Equipment Association (ISEA) standard Z358.1, "American National Standard for Emergency Eyewash and Shower Equipment" are provided in any work area where a person's eyes or skin may be exposed to a hazardous substance, having regard to the risk of exposure and the hazard information for that substance;

(m) a person does not enter any accommodations area while wearing clothing that is likely to have been contaminated by a hazardous substance, other than a space within that area that has been designated by the employer for the removal of contaminated clothing;

(n) any person who handles, cleans or disposes of clothing at a workplace does so in a manner that minimizes exposure of persons to hazardous substances, including by

(i) storing clothing that is wet or likely to have been contaminated with a hazardous substance separately from clothing that is not wet or contaminated, and

(ii) laundering clothing that is likely to have been contaminated with a hazardous substance separately from other clothing;

(o) any use of a device that is capable of emitting energy in the form of electromagnetic waves conforms to the applicable safety code, including any addendums, published by the federal Department of Health;

(p) any non-destructive testing activity that involves a device that is capable of emitting energy in the form of electromagnetic waves is carried out by a person certified by the federal Department of Natural Resources' National Non-Destructive Testing Certification Body;

(q) every piping system that contains a hazardous substance is

(i) designed to control static electricity,

(ii) fitted with valves or other safety devices to ensure its safe operation,

(iii) marked using any method, including colour-coding or signage, to identify the hazardous substance it contains and, where applicable, the direction of the flow, and

(iv) notwithstanding paragraph 87(1)(e), inspected before it is placed in service and then at least once a year; and

(r) where an employee is carrying out work on a piping system that contains a hazardous substance,

(i) the following engineering controls are fitted on pipes as necessary to prevent the inadvertent discharge of the substance:

(A) a blank or blind, in conjunction with valves or other blocking seals that are secured in the closed position to prevent the substance from reaching the blank or blind,

(B) a double block and bleed system, consisting of 2 valves or other blocking seals that are secured in the closed position and located on each side of a valve or other mechanism that is secured in the open position to allow for bleed-off between the 2 seals, or

(C) another engineering control that has been approved by a professional engineer,

(ii) the location of any blank or blind referred to in clause (i)(A) is clearly marked on the pipe and all valves and other seals and mechanisms referred to in clause (i)(A) or (B) are clearly marked to indicate the position they are in, and

(iii) any engineering control referred to in clause (i)(B) or (C) is monitored for leaks throughout the work.

(2) Each valve or other seal or mechanism referred to in subparagraph (1)(r)(i) shall be secured in the open or closed position, as

the case may be, using a positive mechanical device that is designed to resist being opened inadvertently, other than as a result of excessive force.

(3) An employer shall retain all records of exposure referred to in paragraph 201.19(g) of the Act for 40 years after the day on which the exposure is first documented.

Identification

158. (1) For the purpose of paragraph 201.19(c) of the Act, any container that contains a hazardous substance, other than a hazardous product, is to be clearly marked with the substance's generic name and hazardous properties.

(2) Where a safety data sheet or other document that identifies and sets out hazard information in respect of a hazardous substance, other than a hazardous product, that is stored, handled or used at a workplace may be obtained from the supplier by the employer with control over the workplace, the employer shall obtain that document and make it available to every employee at the workplace.

Hazardous products - labelling

159. (1) Paragraph 201.19(d) of the Act does not apply in respect of

(a) a manufactured article, as defined in section 2 of the *Hazardous Products Act* (Canada);

(b) wood or any product made of wood;

(c) hazardous waste, or the container that contains it, where a sign that clearly and legibly sets out the product identifier and up-to-date hazard information in respect of the waste is posted in a conspicuous place near it;

(d) a portable container containing a hazardous product that is filled from a container that is labelled in accordance with the Act and these regulations where

(i) the hazardous product is to be used immediately, or

(ii) the hazardous product is to be used only during the work shift in which the portable container is filled, it remains under the control of the employee who filled the portable container and is used only by them and the

portable container has applied to it a label that sets out the product identifier for the product;

(e) a laboratory sample, as defined in subsection 5(1) of the *Hazardous Products Regulations* (Canada), that is not in a container received from the supplier, as defined in section 2 of the *Hazardous Products Act* (Canada), where the hazardous product in question is identified with sufficient clarity to permit employees to obtain hazard information in respect of it;

(f) a hazardous product that the employer intends to export, or the container that contains it, where a sign that clearly and legibly discloses the following information is posted in a conspicuous place near the product:

(i) the product identifier for the hazardous product,

(ii) up-to-date hazard information in respect of the hazardous product, and

(iii) the fact that a document referred to in paragraph 201.19(e) of the Act or paragraph 160(1)(c) in respect of the hazardous product is available at the workplace;

(g) any of the following hazardous products, where a sign that clearly and legibly discloses the product identifier is posted in a conspicuous place near the product:

(i) a fugitive emission produced at the workplace,

(ii) a hazardous product in a process or reaction vessel,

(iii) a hazardous product in a pipe or piping system, or

(iv) a bulk shipment, as defined in subsection 5.5(1) of the *Hazardous Products Regulations* (Canada), that has been received at the workplace and has not been transferred to a container; or

(h) any other hazardous product that is not in a container, where a sign that clearly and legibly discloses the information

referred to in subparagraphs (f)(i) to (iii) is posted in a conspicuous place near the product.

(2) For the purpose of paragraph 201.19(d) of the Act, the information that each label shall disclose is the information that is required to be disclosed on a label under the *Hazardous Products Regulations* (Canada) and the hazard symbols that the label shall have displayed on it, and the manner of displaying those symbols, are those required by those regulations.

(3) Notwithstanding subsection (2), the label need only set out

(a) the product identifier and up-to-date hazard information in respect of hazardous waste or the container that contains it;

(b) the information referred to in subparagraphs (1)(f)(i) to (iii) in respect of

(i) a hazardous product that is produced at the workplace or the container that contains it,

(ii) a container that is not received from a supplier, as defined in section 2 of the *Hazardous Products Act* (Canada), or the hazardous product that it contains,

(iii) a hazardous product or container that was previously labelled in accordance with subsection (2) where that label became illegible or was lost, or

(iv) a hazardous product or container for which the employer is actively seeking a label that conforms to subsection (2); or

(c) the information referred to in subparagraphs (1)(f)(i) and (ii) in respect of

(i) a product listed in Schedule 1 to the *Hazardous Products Act* (Canada) or the container that contains it, or

(ii) a nuclear substance, as defined in section 2 of the *Nuclear Safety and Control Act* (Canada), or the container that contains it.

Hazardous products - safety data sheets

160. (1) Paragraph 201.19(e) of the Act does not apply in respect of

(a) a manufactured article, as defined in section 2 of the *Hazardous Products Act* (Canada);

(b) wood or any product made of wood;

(c) the following hazardous products, where the employer makes available a document containing the product identifier and detailed, up-to-date hazard information in respect of the product:

(i) a product listed in Schedule 1 to the *Hazardous Products Act* (Canada), or

(ii) a nuclear substance, as defined in section 2 of the *Nuclear Safety and Control Act* (Canada);

(d) a hazardous product that is produced at the workplace and is a fugitive emission or an intermediate product undergoing reaction within a process or reaction vessel;

(e) hazardous waste; or

(f) any hazardous product for which the employer is actively seeking the document referred to in that paragraph, as long as any label affixed to, printed on or attached to the product or container that contains information about the product is not removed, defaced, modified or altered.

(2) The information that shall be disclosed for the purpose of subparagraph 201.19(e)(v) of the Act is all information not referred to in subparagraphs 201.19(e)(i) to (iv) of the Act that is required to be included on a safety data sheet under the *Hazardous Products Regulations* (Canada).

Exemption from requirement to disclose

161. (1) Where an employer has filed a claim under subsection 11(2) of the *Hazardous Materials Information Review Act* (Canada) for an exemption from a requirement under that Act to disclose information, it shall disclose in place of that information on any safety data sheet or other document, label or sign

(a) where there has been no final determination in respect of the claim, the date on which the claim for exemption was filed and the registry number assigned to the claim under section 10 of the *Hazardous Materials Information Review Regulations* (Canada); or

(b) where the final determination in respect of 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) Notwithstanding subsection (1), where the claim for exemption is in respect of a product identifier, the employer shall disclose, in place of the product identifier on any safety data sheet or other document, label or sign, a code name or code number assigned by the employer to identify the hazardous product.

Instruction and training

162. The instruction and training that an employer shall provide to its employees includes

(a) where the employee is likely to handle or be exposed to a hazardous substance, training with respect to the content required on labels and safety data sheets and the purpose and significance of that content;

(b) where the employee installs, operates, maintains or repairs a piping system that contains a hazardous substance, or any component of such a system, training with respect to the significance of the colour-coding, signage or other markings referred to in subparagraph 157(1)(q)(iii); and

(c) where the employee is one referred to in paragraph (a) or (b), instruction with respect to procedures for the safe storage, handling, use and disposal of the hazardous substances to which they may be exposed, including procedures to be followed in an emergency involving a hazardous substance or when a fugitive emission is present.

Provision of information in emergency

163. For the purpose of subsection 201.20(1) of the Act, a medic is a prescribed medical professional.

PART XXXII
DIVING

Definitions

164. In this Part

(a) "decompression table" means a table or set of tables that shows a schedule of rates for safe descent and ascent and decompression stop times, having regard to the breathing mixture to be used by a diver during a dive;

(b) "dive contractor" means an employer that exercises direction and control over diving operations at a workplace;

(c) "dive team" means all divers, standby divers, dive support personnel and dive supervisors on a dive project; and

(d) "dive safety specialist" means a person designated under subsection 168(1).

Occupational health and safety program

165. The risks associated with diving operations are prescribed risks for the purpose of paragraph 201.17(2)(a) of the Act and the occupational health and safety program in respect of a workplace from which a dive project is carried out shall include

(a) procedures for consulting with employees who perform a variety of roles in the diving operations, including members of the dive team, with respect to the management of risks to divers' health and safety;

(b) procedures for obtaining the agreement of the dive safety specialists designated in respect of the dive project with respect to the hazards identified, the risks assessed and the hazard control measures to be implemented;

(c) procedures for safely carrying out each task associated with the dive project, including with regard to the equipment to be used;

(d) procedures for ensuring divers' safe and controlled entry into and exit from the water;

(e) procedures for carrying out decompression in a manner that will minimize decompression sickness or other adverse

effects on divers, including having regard to repetitive factor and residual inert gases;

(f) procedures for treating decompression sickness, including decompression sickness that results from planned or unplanned omitted decompression, and communicating with a specialized dive physician in respect of that treatment;

(g) procedures for responding to hazardous weather or water conditions;

(h) procedures for aborting and resuming dives;

(i) procedures for calculating, in a manner that allows for leakage, waste and other unplanned depletions, the quantities of breathing mixtures required by divers, including for both primary and secondary use and for therapeutic treatment;

(j) procedures for storing breathing mixtures that, among other things, identify a single Canadian or international standard to be used for the colour-coding of all gas cylinders and quads or other banks associated with the dive project;

(k) procedures for providing breathing mixtures to divers;

(l) procedures for ensuring that all materials or objects introduced into or used in diving bells or compression chambers do not contain or produce gases or vapours that may be harmful to divers;

(m) procedures for maintaining divers' thermal balance and comfort, including by heating their breathing mixtures where necessary and ensuring the continued supply of heat in the event of any failure of the primary thermal control system;

(n) procedures for installing barriers or isolating energy sources as necessary to protect divers from contact with hazards;

(o) procedures for ensuring that the dive contractor is made aware of any seismic work being carried out in the vicinity of the workplace that may pose a risk to divers' health or safety and for communicating with the persons carrying out that seismic work;

(p) procedures for assessing seabed or seawater contamination levels in areas in which contamination is a known hazard; and

(q) where the workplace is a dynamically positioned vessel,

(i) procedures for responding to changes in its station keeping status,

(ii) procedures for operating in close proximity to marine installations or structures or other physical obstacles,

(iii) procedures for guarding against thruster wash and suction effect,

(iv) procedures for preventing equipment entanglement, and

(v) procedures for repositioning the vessel that address, among other things, the maximum increments for repositioning and heading change while divers are in the water.

Prohibitions

166. It is prohibited to carry out the following diving activities at or from any workplace:

(a) diving using a self-contained underwater breathing apparatus; and

(b) surface-supplied diving using a breathing mixture that contains helium.

Instruction

167. The instruction that a dive contractor shall provide to all dive team members includes instruction on the hazards of diving in cold water and the appropriate emergency response to any loss of heating to a diver, their breathing mixture or their equipment.

Dive safety specialists

168. (1) The operator of a workplace from which a dive project is to be carried out and the dive contractor that exercises direction and control over the diving operations at that workplace shall each designate in writing a competent person as a dive safety specialist, to be present at the workplace for the duration of the dive project and be available during all dives to advise on any matter related to the safety of the project.

(2) Each dive safety specialist shall

(a) conform to the competencies set out for offshore dive safety specialists in CSA Group standard Z275.4, "Competency standard for diving, hyperbaric chamber, and remotely operated vehicle operations"; and

(b) have no other duties that will interfere with their ability to provide prompt advice.

(3) The dive safety specialist designated by the operator shall be independent of the dive contractor and the dive safety specialist designated by the dive contractor shall be independent of the operator.

(4) The same person shall not be designated as a dive safety specialist by both the operator and dive contractor in respect of the same dive project.

Emergency response plan

169. (1) The emergency response plan developed under section 18 in respect of a workplace from which a dive project is carried out shall include provisions developed by the dive contractor, in consultation with the dive safety specialists for the project and, as the case may be, the installation manager referred to in section 189.2 of the Act or the offshore construction manager and dive vessel master, that

(a) set out procedures for responding to all vessel or dive system emergencies that have the potential to compromise divers' safety;

(b) set out procedures for responding to chamber system emergencies, including fire, loss of pressure, atmospheric contamination and life-support system malfunction;

(c) set out procedures to be followed in the case of any loss of communication;

(d) set out procedures for ensuring that any emergency at the workplace does not impede the provision of life support to divers, including during evacuation, recovery, decompression and observation for decompression sickness;

(e) set out procedures in relation to the rescue of a diver;

(f) where the dive project involves saturation diving, set out procedures

(i) for locating and recovering a lost diving bell,

(ii) for responding to the loss of atmospheric pressure within a diving bell, and

(iii) in relation to emergency hyperbaric evacuation, including the recovery and transport to a hyperbaric reception facility of self-propelled hyperbaric lifeboats, their reception at that facility and the replenishment of resources on the lifeboats; and

(g) address any other matters that are necessary for preparing for and responding to emergencies that have the potential to compromise divers' safety.

(2) The dive contractor shall ensure that detailed emergency response procedures covering all reasonably foreseeable emergencies are readily available to all persons at the workplace who may have a role in carrying them out.

(3) In addition to conforming to subsection 18(3), a dive contractor shall ensure that the emergency response plan for the workplace from which the dive project for which it exercises direction or control over diving operations is carried out is made readily available to all persons, including those not at the workplace, who may have a role in responding to a dive emergency.

Emergency drills and exercises

170. The plan established under section 30 for any workplace from which a dive project is carried out shall include provisions, developed by the dive contractor, requiring the conduct of exercises and drills with respect to all reasonably foreseeable dive emergencies, including

(a) diver evacuation drills, including, where the dive project involves saturation diving, drills involving the boarding of a self-propelled hyperbaric lifeboat, to be conducted prior to the first dive being carried out under the dive project and then at least once a month;

(b) exercises involving the simulation by the members of the dive team of the procedures for dealing with a diver who has

suffered injury or decompression sickness, including communication with a specialized dive physician, to be conducted at least once a month;

(c) where the dive project involves the use of dynamic positioning equipment, drills completed on the diving vessel simulating the loss of dynamic positioning capability, to be conducted at least once a month;

(d) where the dive project involves saturation diving,

(i) drills involving the location and recovery of a lost diving bell, to be conducted prior to the first dive being carried out under the dive project and then at least once every 3 months, and

(ii) drills involving the launch and manoeuvring of self-propelled hyperbaric lifeboats, to be conducted at least once every 6 months; and

(e) drills or exercises in respect of all other reasonably foreseeable diving emergencies, to be conducted at least once a month.

Dive project plan

171. (1) A dive contractor shall, in respect of each dive project for which it exercises direction or control over the diving operations, in consultation with the dive safety specialists for the project and, as the case may be, the installation manager referred to in section 189.2 of the Act or the offshore construction manager and dive vessel master, establish, maintain and implement a written dive project plan that sets out, in detail, all operational and safety elements of the proposed dive project, including

(a) a description of each dive to be carried out that includes an indication of

(i) the diving technique to be used,

(ii) the tasks to be carried out,

(iii) any specialized equipment to be used,

(iv) the estimated and maximum time to be spent at each depth,

(v) the number of divers involved, and

(vi) the hours each diver will be expected to work, including the frequency and duration of their breaks;

(b) the composition of the dive team and the qualifications and any specialized training required of its members;

(c) the hierarchy of command for the project;

(d) a list of legislation, standards and codes of practice that are applicable to any aspect of the dive project;

(e) a list of all vessels to be used in the dive project, including rescue vessels to be on standby;

(f) the decompression tables to be used;

(g) the types of equipment, including personal protective equipment, that are to be worn or used by members of the dive team and the quantity of each that is required to ensure sufficient availability for standby divers;

(h) procedures, approved by a specialized dive physician, for carrying out the medical checks referred to in paragraphs 172(2)(b) and (3)(b);

(i) schematic diagrams indicating, for each vessel to be used, the distance at various depths from a diver to the vessel's propulsion system components and other hazards to the diver and their umbilical, as well as the corresponding safe umbilical lengths;

(j) a description of the diving system and any dynamic positioning equipment to be used;

(k) a description of the potential failure modes of the diving system and any dynamic positioning equipment to be used, the consequences of such failures and the mitigation measures to be taken, including an indication of which of the

system's or equipment's components require redundancy, as determined on the basis of a failure modes and effects analysis;

(l) schedules for inspecting the diving system and its components and the positions of those responsible for carrying out those inspections;

(m) a description of all subsea lifts planned;

(n) the means of communication to be used among members of the dive team and employees on the bridge, at the dive control station and at the dynamic positioning control station, and to support the provision of medical and emergency response services, including secondary means to be used in the case of a failure of the primary means or a loss of power, and procedures to be followed in the case of a total loss of communication;

(o) a copy of the emergency response plan developed in respect of the workplace under section 18;

(p) the method by which the dive project plan is to be communicated to the dive team and any other persons who may be affected by the plan;

(q) procedures for managing any changes that require deviation from the plan; and

(r) any other information that is necessary to plan for safe diving operations.

(2) For the purpose of paragraph (1)(b), the composition of the dive team shall be determined having regard to the risk assessment carried out in accordance with the occupational health and safety program and that team shall include

(a) no fewer than 2 dive supervisors on shift at the dive control station at all times during a dive, with the exception of breaks, during which one supervisor may be replaced at the dive control station by another competent person;

(b) sufficient dive support personnel to support the divers and operate and maintain all equipment; and

(c) in the case of surface-supplied diving, sufficient divers to ensure the availability of standby divers who satisfy the requirements set out in paragraph 172(2)(c).

(3) All means of communication referred to in paragraph (1)(n) shall be dedicated and continuous and, where used between a dive supervisor and diver, shall

(a) have sufficient sound quality to permit breathing and speech to be clearly heard without distortion;

(b) where the diver is using a breathing mixture that contains a substance that distorts the voice, be equipped with a voice descrambler; and

(c) be equipped with a recording device that continuously records all transmissions while a dive is in progress.

Dive contractor obligations

172. (1) A dive contractor shall ensure, with respect to all diving operations under its direction and control, that

(a) the diving system used conforms to the annex to International Maritime Organization Resolution A.831(19), "Code of Safety for Diving Systems, 1995";

(b) each member of the dive team and the pilot of any remotely operated vehicle being deployed conforms to the applicable competencies set out in CSA Group standard Z275.4, "Competency standard for diving, hyperbaric chamber, and remotely operated vehicle operations";

(c) each diver and dive supervisor holds a valid standard first aid certificate or advanced first aid certificate and a valid certificate in first aid oxygen administration;

(d) each diver has been certified, within the 12-month period ending on the last day of the diving operation, as being medically fit to dive by one of the following physicians and

has confirmed that their medical condition has not changed since their most recent certification:

(i) a physician who is licensed to practise medicine in Canada and meets the competencies of a Level 1 Physician set out in CSA Group standard Z275.4, "Competency standard for diving, hyperbaric chamber, and remotely operated vehicle operations", or

(ii) a specialized dive physician who bases their certification on their review of a medical fitness certification issued in a jurisdiction outside of Canada within the same 12-month period;

(e) a specialized dive physician is readily available at all times to provide medical advice from a remote location in the province and to be transported to the workplace, where necessary, to provide medical treatment, including to a diver in a compression chamber;

(f) any person performing first aid on a diver has unimpeded access to a means of communicating with the specialized dive physician;

(g) appropriate equipment is available at the workplace to permit the specialized dive physician, from a remote location, to

(i) communicate directly with a diver inside a compression chamber,

(ii) observe and examine a diver inside a compression chamber by means of visual and auditory aids, and

(iii) use available monitoring or clinical assessment technologies on a diver;

(h) the data transfer rate at the workplace is sufficient to permit continuous monitoring of a person inside a compression chamber and to allow the results of ongoing medical testing, such as electrocardiograms, to be transferred to the specialized dive physician, as determined through testing before the start of the diving operations;

(i) breathing mixtures that conform to CSA Group standard Z275.2, "Operational safety code for diving operations" or European Committee for Standardization (CEN) standard EN 12021, "Respiratory equipment — Compressed gases for breathing apparatus" are available in the quantities calculated in accordance with paragraph 165(i);

(j) each diver has independent primary and secondary breathing mixture supplies, each of which can be isolated from the supplies of other divers;

(k) breathing mixtures are available to divers at a rate appropriate to the depth and circumstances of the dive but no less than 62.5 litres per minute;

(l) breathing mixtures are stored in compressed gas cylinders that have been certified by a competent person who is independent of the operator, dive contractor and manufacturer as being safe for that use;

(m) the applicable colour code referred to in paragraph 165(j) is posted in a conspicuous place in all breathing mixture storage areas;

(n) the oxygen content of each breathing mixture is analyzed by a member of the dive team on receipt of the mixture and immediately prior to each dive for which that mixture is to be used and any breathing mixture found to contain more than 25 percent oxygen by volume is handled as if it were pure oxygen;

(o) where a remotely operated vehicle is deployed while divers are in the water, there is a dedicated and continuous means of communication between the dive supervisor and the vehicle's pilot and a monitor at the dive control station displays the same picture as seen by the pilot;

(p) where a dive is being carried out from a dynamically positioned vessel,

(i) the vessel is equipped with

(A) an indicator that continuously displays its station keeping status,

(B) a visual and audible alarm system that warns of station keeping status changes, and whose alarms are visible and audible on the bridge, at the dive control station and in any other location where knowledge of such a change would be important for ensuring diver safety, and

(C) a fixed means of communication between the vessel's bridge and the dive control station and between the dive control station and the dynamic positioning control station that is capable of working even in the event of a total loss of power to the vessel, and

(ii) there is a dedicated and continuous means of communication between the dive control station and the dynamic positioning control station for the duration of the dive and employees at each station inform those at the other station immediately of any changes in operational circumstances;

(q) divers' breathing patterns are continuously monitored and their activities continuously observed and recorded for the duration of each dive;

(r) every diver's location in the water is continuously monitored for the duration of each dive;

(s) effective means of assisting and recovering divers are available for the duration of each dive;

(t) any dive during which a diver loses thermal balance or there is a failure of a thermal control system is immediately suspended and all divers are returned to the diving bell, where safe, or to the surface, even where the loss or failure is expected to be temporary;

(u) decompression is carried out only in accordance with the applicable decompression table identified in the dive project

plan, except in extenuating circumstances and in consultation with a specialized dive physician;

(v) a diver does not travel by air within 24 hours after a dive or while suffering from decompression sickness, unless approved by a specialized dive physician; and

(w) the medical report associated with each diver's certification under paragraph (d) is readily available, in the case of an emergency, to members of the dive team who hold a diving medical technician certificate and to the specialized dive physician referred to in paragraph (e), in an official language understood by that physician.

(2) Where the diving operation involves surface-supplied diving, the dive contractor shall also ensure that

(a) there is, at all times, at least one member of the dive team who holds a valid diving medical technician certificate and is not on a mandatory rest period on the surface and readily available to provide assistance to the divers;

(b) medical checks are carried out by a member of the dive team who holds a diving medical technician certificate, or by a medic under the direction of the specialized dive physician, on each diver at the beginning and end of each shift during which they dive;

(c) except in the case of an emergency, each standby diver has had 12 consecutive hours of rest since their most recent dive and has no residual inert gas in their tissue as calculated in accordance with the applicable decompression table set out in the dive project plan;

(d) a dive is not carried out at pressures greater than 50 metres sea water or where the partial pressure of oxygen exceeds 1.4 atmospheres absolute;

(e) sufficient double-lock deck compression chambers that have an inside diameter of at least 1.524 metres and that can accommodate all divers who need to undergo decompression at any one time, as well as all other persons needing to be in the chamber with the divers to carry out the decompression

procedures or provide medical care to them, are available at the workplace to allow for decompression in accordance with the applicable decompression table identified in the dive project plan; and

(f) where diving occurs from a light dive craft, the time needed to transport a diver from the surface to the deck compression chamber or medical room on the primary vessel from which the light dive craft is deployed does not exceed 15 minutes.

(3) Where the diving operation involves saturation diving, the dive contractor shall also ensure that

(a) each diver holds a valid diving medical technician certificate;

(b) medical checks are carried out by a member of the dive team who holds a diving medical technician certificate, or by a medic under the direction of the specialized dive physician, on each diver immediately before they enter the compression chamber and immediately after they exit it after decompression;

(c) at least 2 diving bells are available, each of which

(i) is capable of sustaining the lives of the divers in it and protecting them against hypothermia for at least 24 hours,

(ii) is equipped with an emergency locating device whose signals the marine installation or structure from which the dive operation is carried out, and all rescue vessels on standby, are equipped to receive and interpret,

(iii) has suitable protective devices fitted to its main umbilical to control loss of atmospheric pressure in the diving bell where any of the components in the umbilical are ruptured, and

(iv) has its internal atmosphere continuously monitored for contaminants and oxygen and carbon dioxide levels by both a primary and secondary monitoring system for the duration of each dive, with the data displayed both in

the diving bell and at the dive control station, and the oxygen and carbon dioxide levels being recorded at least hourly;

(d) the relative humidity in all living chambers is maintained between 40 percent and 60 percent at all depths, regardless of the number of divers in the chamber;

(e) pressurization is not scheduled to last more than 28 days; and

(f) a hyperbaric evacuation system that includes the following is readily available for the evacuation and reception of all divers:

(i) a hyperbaric reception facility, and

(ii) self-propelled hyperbaric lifeboats that are equipped with a life support package sufficient to sustain the lives of the divers and for which a mating trial with the reception facility has been conducted.

Dive record

173. (1) A dive contractor shall make and sign a record that sets out, in respect of each dive carried out under its direction or control,

(a) the date and location of the dive;

(b) the names of all divers, standby divers and dive supervisors;

(c) the task carried out;

(d) a list of the tools and equipment used that includes, in respect of each piece of equipment that is part of the diving apparatus, its type and serial number;

(e) the breathing mixture used;

(f) the time the diver began their descent from the surface;

(g) the maximum depth attained;

(h) the time spent at the maximum depth;

(i) the time the diver began their ascent from the maximum depth;

(j) the time the diver reached the surface;

(k) the surface interval, in the case of a repetitive dive;

(l) the type of decompression carried out and the decompression table used;

(m) the environmental conditions during the dive; and

(n) any remarks, including with respect to any unusual occurrences during the dive.

(2) The dive contractor shall retain the record for 5 years after the day on which the dive is completed.

(3) The dive contractor shall retain all recordings referred to in paragraphs 171(3)(c) and 172(1)(q) for 48 hours after the diver has returned to the surface or living chamber, as the case may be, or any longer period that is necessary to enable the operator to investigate an occupational disease, accident, incident or other hazardous occurrence under subsection 201.14(2) of the Act.

PART XXXIII
CONSEQUENTIAL AMENDMENTS, REPEAL AND COMMENCEMENT

NLR 18/97 Amdt.

174. (1) Subparagraph 4(2)(a)(i) of the *Offshore Certificate of Fitness Newfoundland and Labrador Regulations* is repealed and the following substituted:

(i) is designed, constructed, transported, installed, established, maintained or equipped in accordance with

(A) Parts I to III of the *Offshore Petroleum Installations Newfoundland and Labrador Regulations*, and

(B) the provisions of the *Offshore Area Occupational Health and Safety Regulations* listed in Part I of the schedule,

(2) Part I of the Schedule to the regulations is repealed and the following substituted:

PART I

PROVISIONS OF OFFSHORE AREA OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

1. Sections 23 to 25
2. Subsection 26(1)
3. Section 27
4. Subsection 32(2) and paragraphs 32(4)(a), (c), (d), (f), (g) and (i)
5. Paragraphs 57(1)(a) and (c) to (e)
6. Subsections 58(1) and (2) and paragraphs 58(3)(a) to (e)
7. Subsection 60(1) and paragraphs 60(2)(a) and (d)
8. Subsection 61(1) and paragraphs 61(2)(a) to (c) and (e)
9. Sections 62 to 64
10. Paragraphs 66(b) and (c)
11. Subsection 67(1)
12. Section 73
13. Subsection 74(1)
14. Sections 78 to 80
15. Paragraph 82(b)
16. Sections 83 to 85
17. Paragraphs 91(1)(a), (d) and (o)

18. Subsection 93(1)

19. Sections 97 and 98

20. Section 100

21. Subsection 101(1)

22. Paragraphs 107(a) to (d)

23. Subsections 113(2) and (3)

24. Paragraphs 121(1)(a) and (c), subparagraph 121(1)(j)(ii) and paragraphs 121(1)(l) to (o), (r) and (t)

25. Subsection 122(6), paragraph 122(7)(a) and subparagraph 122(7)(b)(i)

26. Subsections 124(2) and (3)

27. Subsection 125(1)

28. Paragraphs 144(1)(b), (d), (o), (r), (s) and (x)

29. Paragraph 157(1)(b) and subparagraph 157(1)(k)(i)

30. Paragraphs 172(1)(a), (g), (l), (m), (o), (p) and (s), 172(2)(e) and 172(3)(c) and (f)

(3) Part II of the Schedule to the regulations is repealed.

NLR 102/14 Rep.

175. The *Transitional Regulations*, Newfoundland and Labrador Regulations 102/14, are repealed.

Commencement

176. These regulations come into force on January 1, 2022.

SCHEDULE A

Approach Boundaries for Alternating Current Systems (distance from energized electrical conductor or circuit part to person)

	Column 1	Column 2	Column 3	Column 4
Item	Nominal System Voltage Range, Phase to Phase [a]	Limited Approach Boundary		Restricted Approach Boundary
		Exposed Energized Electrical Conductor	Exposed Energized Circuit Part	
1	Less than 30 V	Not applicable	Not applicable	Not applicable
2	31 V – 150 V	3.0 m	1.0 m	> 0 m
3	151 V – 750 V	3.0 m	1.0 m	0.3 m
4	751 V – 15 kV	3.0 m	1.5 m	0.7 m
5	15.1 kV – 36 kV	3.0 m	1.8 m	0.8 m
6	36.1 kV – 46 kV	3.0 m	2.5 m	0.8 m
7	46.1 kV – 72.5 kV	3.0 m	2.5 m	1.0 m
8	72.6 kV – 121 kV	3.3 m	2.5 m	1.0 m
9	138 kV – 145 kV	3.4 m	3.0 m	1.2 m
10	161 kV – 169 kV	3.6 m	3.6 m	1.3 m

11	230 kV – 242 kV	4.0 m	4.0 m	1.7 m
12	345 kV – 362 kV	4.7 m	4.7 m	2.8 m
13	500 kV – 550 kV	5.8 m	5.8 m	3.6 m
14	765 kV – 800 kV	7.2 m	7.2 m	4.9 m
a	For single-phase systems above 250 V, select the range that is equal to the system's maximum phase-to-ground voltage times 1.732.			

SCHEDULE B

Approach Boundaries for Direct Current Systems (distance from energized electrical conductors or circuit parts to person)

	Column 1	Column 2	Column 3	Column 4
Item	Nominal System Voltage Range, Phase to Phase	Limited Approach Boundary		Restricted Approach Boundary
		Exposed Energized Electrical Conductor	Exposed Energized Circuit Part	
1	Less than 30 V	Not applicable	Not applicable	Not applicable
2	31 V – 300 V	3.0 m	1.0 m	> 0 m
3	301 V – 1	3.0 m	1.0 m	0.3 m

	kV			
4	1.1 kV – 5 kV	3.0 m	1.5 m	0.4 m
5	5.1 kV – 15 kV	3.0 m	1.5 m	0.7 m
6	15.1 kV – 45 kV	3.0 m	2.5 m	0.8 m
7	45.1 kV – 75 kV	3.0 m	2.5 m	1.0 m
8	75.1 kV – 150 kV	3.4 m	3.0 m	1.2 m
9	150.1 kV – 250 kV	4.0 m	4.0 m	1.6 m
10	250.1 kV – 500 kV	6.0 m	6.0 m	3.5 m
11	500.1 kV – 800 kV	8.0 m	8.0 m	5.0 m

Extraordinary Gazette Index

Title of Act and Subordinate Legislation made thereunder	CNLR or NL Reg.	Amendment	NL Gazette Date & Page No.
Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act			
Offshore Area Occupational Health and Safety Regulations	NLR 79/21	R&S NLR 102/14	Dec. 22/21 p. 3
[In force January 1, 2022]			