

2024

Ontario Occupational Health
and Safety Act and Regulations

The Green Book



**Workplace
Wellbeing**

Required Statements:

The King's Printer for Ontario holds copyright in Ontario statutes, regulations, and judicial decisions. In its permission to reproduce the statutes and regulations contained in this book, it requires that the legal materials must be reproduced accurately.

The publisher of this book acknowledges that Crown copyright in the legal materials contained herein belong to:

© King's Printer for Ontario, 2024.

As required by The Legislation Act, 2006, we confirm that the statutes and regulations contained in this book are not official versions of those statutes and regulations.

Notices and Disclaimers:

This publication is provided on the understanding that the contents have been gathered from various sources using commercially reasonable efforts. The publishers and all those involved in the preparation do not guarantee the accuracy of its contents or that it is completely up to date. We are not responsible for the results of any action taken based on the information contained herein or for the consequences of any errors or omissions. Nothing in this book should be construed as providing legal or other professional advice. If such advice is required, then an appropriate professional should be contacted.

Copyright:

© Occupational Safety Group Inc., 2024

ISBN 978-1-7780066-5-4

Introduction

The 2024 Ontario Occupational Health & Safety (OH&S) Act and Regulations, “The Green Book,” has been designed to assist the user in making the information accessible and easy to find.

We have provided a simple table of contents at the beginning with comprehensive, but easy to use indexing at the end.

The most frequently accessed regulations are separated via tabs, placed in the beginning sections of the book, and they are complimented with their own corresponding index. All of the indexes are grouped together at the back of the book. This book is one of several publications of the Occupational Health & Safety Act and Regulations, and it is affectionately referred to as “The Green Book.”

How to Use this Book

Step 1 – Find the index tab for the OH&S Act or Regulation

The index tabs are towards the back of the book. The OH&S Act and most commonly used regulations have their own tab and index. All other regulations are found in the “Other Regulations” tab.

Step 2 – Find the word or phrase

Note: a word or phrase may appear in more than one Regulation and/or the OH&S Act.

Step 3 – Go to the page number

Who should use this book?

This book should be used as a reference by those workplaces subject to the OH&S Act and Regulations of Ontario. This encompasses most workplaces, with the exception of those workplaces federally regulated under the “Canada Labour Code.”

Examples of Federally Regulated operations:

- Federal government and federal public services
- Many Crown corporations and agencies
- Banks
- Railways, highway, and air transportation
- Ferries, tunnels, bridges, and canals
- Telephone and telegraph systems

- Pipelines
- Radio and television broadcasting and cable systems
- Interprovincial shipping and shipping services
- Ships, trains, and aircraft
- Grain elevators licensed by the Canadian Grain Commission, and certain feed mills and feed warehouses, flour mills, and grain seed cleaning plants
- Aboriginal reserves
- Exploration and development of petroleum on federal land

If there is any doubt as to which Regulation governs your work environment, please contact the Ministry of Labour, Immigration, Training, and Skills Development at 1-877-202-0008.

Errors and Omissions

If you find any errors or omissions, or have suggestions for improvements to this book or its contents, please call us at 1-877-652-5262 or email us at info@osg.ca

What's New for 2024

Construction Projects

The Ontario government has introduced new requirements to the Construction regulations that require personal protective equipment (PPE) and clothing to be properly fitted for workers with diverse body types. Additionally, these regulations now mandate that employers provide safe, clean, and private restroom facilities for all workers.

Naloxone Kits

The Naloxone Kits regulation (O.Reg. 559/22) has been officially enacted. This newly instituted regulation specifies the contents of a naloxone kit and outlines supplementary prerequisites concerning the provisioning and maintenance of these kits.

Ontario Occupational Health & Safety Act and Regulations “The Green Book”

Table of Contents

Occupational Health and Safety Act	
Contents	1
Definitions	5
Part I Application	11
Part II Administration	12
Part II.1 Prevention Council, Chief Prevention Officer and Designated Entities	34
Part III Duties of Employers and Other Persons	44
Part III.0.1 Violence and Harassment	55
Part III.1 Codes of Practice	60
Part IV Toxic Substances	62
Part V Right to Refuse or To Stop Work Where Health or Safety in Danger	72
Part VI Reprisals By Employer Prohibited	82
Part VII Notices	85
Part VIII Enforcement	88
Part IX Offences and Penalties	106
Part X Regulations	110
Ontario Court of Justice Fines - Schedule 66.2	117
Industrial Establishments	
Regulation 851	121
Ontario Court of Justice Fines-Schedule 67.3	169
Ontario Court of Justice Fines-Schedules 67.4	178
Construction Projects	
Regulation 213/91	181
Ontario Court of Justice Fines-Schedule 67	386

Ontario Court of Justice Fines-Schedule 67.1	396
Workplace Hazardous Materials Information System (WHMIS)	
Regulation 860	399
First Aid Requirements	
Regulation 1101	417
Control of Exposure to Biological or Chemical Agents	
Regulation 833	429
Confined Spaces	
Regulation 632/05	459
Health Care and Residential Facilities	
Regulation 67/93	477
Other Regulations	
Needle Safety	
Regulation 474/07	519
X-Ray Safety	
Regulation 861	522
Diving Operations	
Regulation 629/94	534
Ontario Court of Justice Fines-Schedule 67.2	584
Farming Operations	
Regulation 414/05	586
Firefighters-Protective Equipment	
Regulation 714/94	588
Teachers	
Regulation 857	592
Occupational Health and Safety Awareness and Training	
Regulation 297/13	593
Ontario Court of Justice Fines-Schedule 67.5	599

Oil and Gas-Offshore

Regulation 855	600

Window Cleaning

Regulation 859	623

Roll-Over Protective Structures

Regulation 856	640

Designated Substances

Regulation 490/09	643

Designated Substance-Asbestos on Construction Projects and in Building Repair Operations

Regulation 278/05	674

Notices and Reports Under Sections 51 to 53.1 of the Act - Fatalities, Critical Injuries, Occupational Illnesses and Other Incidents

O. Reg. 420/21	712

Criteria to be Used and Other Matters to be Considered by the Board Under Subsection 46(6) of the Act

Regulation 243/95	719

Joint Health and Safety Committees - Exemption From Requirements

Regulation 385/96	721

University Academics and Teaching Assistants

Regulation 858	722

Offices of the Worker and Employer Advisers

Regulation 33/12	723

Noise

Regulation 381/15	724

Naloxone Kits

Regulation 559/22	727

Resources

OCCUPATIONAL HEALTH AND SAFETY ACT

Occupational Health and Safety Act

R.S.O. 1990, CHAPTER O.1

Consolidation Period: From June 8, 2023 to the e-Laws currency date.

Last amendment: 2023, c. 9, Sched. 29, s.14.

CONTENTS

Definitions

PART I APPLICATION

Crown and other Acts
Private residences, farming, teaching
Self-employed persons

PART II ADMINISTRATION

Administration of Act
Delegation of powers
Appointment of inspectors and Directors
Certificate of appointment
Standards – training programs
Standards – persons who provide training
Amendment of standard
Validity of Approval
Collection and use of training information
Certification of members
Accreditation of health and safety management systems
Recognition of employers
Validity of accreditations, recognitions
Information re accreditations, recognitions
Publication
Delegation
Mandatory selection of health and safety representative
Joint health and safety committee
Worker trades committee
Consultation on industrial hygiene testing
Summary to be furnished
Testimony in civil proceedings, etc.
Advisory committees
Contribution to defray cost
Powers under federal legislation

PART II.1
PREVENTION COUNCIL, CHIEF PREVENTION OFFICER
AND DESIGNATED ENTITIES

PREVENTION COUNCIL

Prevention Council

CHIEF PREVENTION OFFICER

Chief Prevention Officer

CHANGES TO FUNDING AND DELIVERY OF SERVICES

If Minister proposes change

DESIGNATED ENTITIES

Eligible for grant

Effect of designation

Compliance and monitoring of designated entities

Appointment of administrator

Delegation of powers and duties

PART III

DUTIES OF EMPLOYERS AND OTHER PERSONS

Duties of constructor

Duties of licensees

Duties of employers

Footwear

Additional duties of employers

Duties of supervisor

Duties of workers

Duties of owners

Duties of owners - washroom access

Duty of project owners

Duties of suppliers

Duties of directors and officers of a corporation

PART III.0.1

VIOLENCE AND HARASSMENT

Policies, violence and harassment

Program, violence

Assessment of risks of violence

Domestic violence

Duties re violence

Program, harassment

Duties re harassment

Information and instruction, harassment

**PART III.1
CODES OF PRACTICE**

Definition

Approval of code of practice

Publication of approval, etc.

Effect of approved code of practice

**PART IV
TOXIC SUBSTANCES**

Orders of Director

Designation of substances

Hazardous material identification and data sheets

Making safety data sheets available

Assessment for hazardous materials

Confidential business information

Information privileged

Hazardous physical agents

Instruction and training

**PART V
RIGHT TO REFUSE OR TO STOP WORK WHERE HEALTH
OR SAFETY IN DANGER**

Refusal to work

Definition and non-application

Bilateral work stoppage

Declaration against constructor, etc.

Unilateral work stoppage

Entitlement to investigate

Complaint re direction to stop work

**PART VI
REPRISALS BY EMPLOYER PROHIBITED**

No discipline, dismissal, etc., by employer

Offices of the Worker and Employer Advisers

**PART VII
NOTICES**

Notice of death or injury

Notice of accident, explosion, fire or violence causing injury

Accident, etc., at project site or mine

Additional notices

PART VIII ENFORCEMENT

Powers of inspector
Order for inspections
Order for written policies
Order for written assessment, etc.
Order for workplace harassment investigation
Order for written notices to Director under s. 52 (1)
Warrants – investigative techniques, etc.
Power of inspector to seize
Orders by inspectors where non-compliance
Entry into barricaded area
Notice of compliance
Injunction proceedings
Appeals from order of an inspector
Obstruction of inspector
Information confidential
Copies of reports
Immunity

PART IX OFFENCES AND PENALTIES

Penalties
Certified copies of documents, etc., as evidence
Place of trial
Publication re convictions
Limitation on prosecutions

PART X REGULATIONS

Regulations
Regulations, taxi industry

Definitions

1 (1) In this Act,

"Board" means the Ontario Labour Relations Board; (*"Commission"*)

"Building Code" means any version of the Ontario Building Code that was in force at any time since it was made under the *Building Code Act, 1974*, the *Building Code Act* of the Revised Statutes of Ontario, 1980, the *Building Code Act* of the Revised Statutes of Ontario, 1990, the *Building Code Act, 1992* or a successor to the *Building Code Act, 1992*; (*"code du bâtiment"*)

"certified member" means a committee member who is certified under section 7.6; (*"membre agréé"*)

"Chief Prevention Officer" means the Chief Prevention Officer appointed under subsection 22.3 (1); (*"directeur général de la prévention"*)

"committee" means a joint health and safety committee established under this Act; (*"comité"*)

"competent person" means a person who,

- (a) is qualified because of knowledge, training and experience to organize the work and its performance,
- (b) is familiar with this Act and the regulations that apply to the work, and
- (c) has knowledge of any potential or actual danger to health or safety in the workplace; (*"personne compétente"*)

"construction" includes erection, alteration, repair, dismantling, demolition, structural maintenance, painting, land clearing, earth moving, grading, excavating, trenching, digging, boring, drilling, blasting, or concreting, the installation of any machinery or plant, and any work or undertaking in connection with a project but does not include any work or undertaking underground in a mine; (*"construction"*)

"constructor" means a person who undertakes a project for an owner and includes an owner who undertakes all or part of a project by himself or by more than one employer; (*"constructeur"*)

"Deputy Minister" means the Deputy Minister of Labour; (*"sous-ministre"*)

"designated substance" means a biological, chemical or physical agent or combination thereof prescribed as a designated substance to which the exposure of a worker is prohibited, regulated, restricted, limited or controlled; (*"substance désignée"*)

"Director" means an inspector under this Act who is appointed as a Director for the purposes of this Act; ("directeur")

"employer" means a person who employs one or more workers or contracts for the services of one or more workers and includes a contractor or subcontractor who performs work or supplies services and a contractor or subcontractor who undertakes with an owner, constructor, contractor or subcontractor to perform work or supply services; ("employeur")

"engineer of the Ministry" means a person who is employed by the Ministry and who is licensed as a professional engineer under the *Professional Engineers Act*; ("ingénieur du ministère")

"factory" means,

- (a) a building or place other than a mine, mining plant or place where homework is carried on, where,
 - (i) any manufacturing process or assembling in connection with the manufacturing of any goods or products is carried on,
 - (ii) in preparing, inspecting, manufacturing, finishing, repairing, warehousing, cleaning or adapting for hire or sale any substance, article or thing, energy is,
 - (A) used to work any machinery or device, or
 - (B) modified in any manner,
 - (iii) any work is performed by way of trade or for the purposes of gain in or incidental to the making of any goods, substance, article or thing or part thereof,
 - (iv) any work is performed by way of trade or for the purposes of gain in or incidental to the altering, demolishing, repairing, maintaining, ornamenting, finishing, storing, cleaning, washing or adapting for sale of any goods, substance, article or thing, or
 - (v) aircraft, locomotives or vehicles used for private or public transport are maintained,
- (b) a laundry including a laundry operated in conjunction with,
 - (i) a public or private hospital,
 - (ii) a hotel, or
 - (iii) a public or private institution for religious, charitable or educational purposes, and

(c) a logging operation; ("usine")

"hazardous material" means a biological or chemical agent named or described in the regulations as a hazardous material; ("matériau dangereux")

"hazardous physical agent" means a physical agent named or described in the regulations as a hazardous physical agent; ("agent physique dangereux")

"health and safety management system" means a coordinated system of procedures, processes and other measures that is designed to be implemented by employers in order to promote continuous improvement in occupational health and safety; ("système de gestion de la santé et de la sécurité")

"health and safety representative" means a health and safety representative selected under this Act; ("délégué à la santé et à la sécurité")

"homework" means the doing of any work in the manufacture, preparation, improvement, repair, alteration, assembly or completion of any article or thing or any part thereof by a person for wages in premises occupied primarily as living accommodation; ("travail à domicile")

"industrial establishment" means an office building, factory, arena, shop or office, and any land, buildings and structures appertaining thereto; ("établissement industriel")

"inspector" means an inspector appointed for the purposes of this Act and includes a Director; ("inspecteur")

"labour relations officer" means a labour relations officer appointed under the *Labour Relations Act, 1995*; ("agent des relations de travail")

"licensee" means a person who holds a licence under Part III of the *Crown Forest Sustainability Act, 1994*; ("titulaire d'un permis")

"logging" means the operation of felling or trimming trees for commercial or industrial purposes or for the clearing of land, and includes the measuring, storing, transporting or floating of logs, the maintenance of haul roads, scarification, the carrying out of planned burns and the practice of silviculture; ("exploitation forestière")

"mine" means any work or undertaking for the purpose of opening up, proving, removing or extracting any metallic or non-metallic mineral or mineral-bearing substance, rock, earth, clay, sand or gravel; ("mine")

"mining plant" means any roasting or smelting furnace, concentrator, mill

S. 1"min"

or place used for or in connection with washing, crushing, grinding, sifting, reducing, leaching, roasting, smelting, refining, treating or research on any substance mentioned in the definition of "mine"; ("installation minière")

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

"Ministry" means the Ministry of Labour; ("ministère")

"occupational illness" means a condition that results from exposure in a workplace to a physical, chemical or biological agent to the extent that the normal physiological mechanisms are affected and the health of the worker is impaired thereby and includes an occupational disease for which a worker is entitled to benefits under the *Workplace Safety and Insurance Act, 1997*; ("maladie professionnelle")

"Office of the Employer Adviser" means the office continued under subsection 176 (2) of the *Workplace Safety and Insurance Act, 1997*; ("Bureau des conseillers des employeurs")

"Office of the Worker Adviser" means the office continued under subsection 176 (1) of the *Workplace Safety and Insurance Act, 1997*; ("Bureau des conseillers des travailleurs")

"owner" includes a trustee, receiver, mortgagee in possession, tenant, lessee, or occupier of any lands or premises used or to be used as a workplace, and a person who acts for or on behalf of an owner as an agent or delegate; ("propriétaire")

"prescribed" means prescribed by a regulation made under this Act; ("prescrit")

"project" means a construction project, whether public or private, including,

(a) the construction of a building, bridge, structure, industrial establishment, mining plant, shaft, tunnel, caisson, trench, excavation, highway, railway, street, runway, parking lot, cofferdam, conduit, sewer, watermain, service connection, telegraph, telephone or electrical cable, pipe line, duct or well, or any combination thereof,

(b) the moving of a building or structure, and

(c) any work or undertaking, or any lands or appurtenances used in connection with construction; ("chantier")

"regulations" means the regulations made under this Act; ("règlements")

"shop" means a building, booth or stall or a part of such building, booth

or stall where goods are handled, exposed or offered for sale or where services are offered for sale; ("magasin")

"supervisor" means a person who has charge of a workplace or authority over a worker; ("superviseur")

"trade union" means a trade union as defined in the *Labour Relations Act, 1995* that has the status of exclusive bargaining agent under that Act in respect of any bargaining unit or units in a workplace and includes an organization representing workers or persons to whom this Act applies where such organization has exclusive bargaining rights under any other Act in respect of such workers or persons; ("syndicat")

"worker" means any of the following, but does not include an inmate of a correctional institution or like institution or facility who participates inside the institution or facility in a work project or rehabilitation program:

1. A person who performs work or supplies services for monetary compensation.
2. A secondary school student who performs work or supplies services for no monetary compensation under a work experience program authorized by the school board that operates the school in which the student is enrolled.
3. A person who performs work or supplies services for no monetary compensation under a program approved by a college of applied arts and technology, university, private career college or other post-secondary institution.

Note: On a day to be named by proclamation of the Lieutenant Governor, paragraph 3 of the definition of "worker" in subsection 1 (1) of the Act is amended by striking out "private career college" and substituting "career college". (See: 2023, c. 9, Sched. 29, s. 14)

4. REPEALED: 2017, c. 22, Sched. 1, s. 71 (2).
5. Such other persons as may be prescribed who perform work or supply services to an employer for no monetary compensation; ("travailleur")

"workplace" means any land, premises, location or thing at, upon, in or near which a worker works; ("lieu de travail")

"workplace harassment" means,

- (a) engaging in a course of vexatious comment or conduct against a worker in a workplace that is known or ought reasonably to be

known to be unwelcome, or

(b) workplace sexual harassment; ("harcèlement au travail")

"workplace sexual harassment" means,

- (a) engaging in a course of vexatious comment or conduct against a worker in a workplace because of sex, sexual orientation, gender identity or gender expression, where the course of comment or conduct is known or ought reasonably to be known to be unwelcome, or
- (b) making a sexual solicitation or advance where the person making the solicitation or advance is in a position to confer, grant or deny a benefit or advancement to the worker and the person knows or ought reasonably to know that the solicitation or advance is unwelcome; ("harcèlement sexuel au travail")

"workplace violence" means,

- (a) the exercise of physical force by a person against a worker, in a workplace, that causes or could cause physical injury to the worker,
- (b) an attempt to exercise physical force against a worker, in a workplace, that could cause physical injury to the worker,
- (c) a statement or behaviour that it is reasonable for a worker to interpret as a threat to exercise physical force against the worker, in a workplace, that could cause physical injury to the worker. ("violence au travail") R.S.O. 1990, c. O.1, s. 1 (1); 1993, c. 27, Sched.; 1994, c. 24, s. 35; 1994, c. 25, s. 83 (1); 1997, c. 16, s. 2 (1-3); 1998, c. 8, s. 49; 2009, c. 23, s. 1; 2009, c. 33, Sched. 20, s. 3 (1); 2011, c. 11, s. 1; 2014, c. 10, Sched. 4, s. 1; 2016, c. 2, Sched. 4, s. 1 (1, 2); 2016, c. 37, Sched. 16, s. 1; 2017, c. 22, Sched. 1, s. 71.

Ship under repair

(2) For the purposes of this Act and the regulations, a ship being manufactured or under repair shall be deemed to be a project. R.S.O. 1990, c. O.1, s. 1 (2)

Limitation

(3) An owner does not become a constructor by virtue only of the fact that the owner has engaged an architect, professional engineer or other person solely to oversee quality control at a project. R.S.O. 1990, c. O.1, s. 1 (3).

Workplace harassment

(4) A reasonable action taken by an employer or supervisor relating to the management and direction of workers or the workplace is not workplace harassment. 2016, c. 2, Sched. 4, s. 1 (3).

Section Amendments with date in force (d/m/y)

1993, c. 27, Sched. - 31/12/1991; 1994, c. 24, s. 35 - 1/01/1995; 1994, c. 25, s. 83 (1) - 1/04/1995; 1997, c. 16, s. 2 (1-3) - 1/01/1998; 1998, c. 8, s. 49 - 29/06/1998

2009, c. 23, s. 1 - 15/06/2010; 2009, c. 33, Sched. 20, s. 3 (1) - 15/12/2009

2011, c. 11, s. 1 - 1/06/2011

2014, c. 10, Sched. 4, s. 1 - 20/11/2014

2016, c. 2, Sched. 4, s. 1 (1-3) - 08/09/2016; 2016, c. 37, Sched. 16, s. 1 - 08/12/2016

2017, c. 22, Sched. 1, s. 71 (1, 2) - 01/01/2018; 2017, c. 25, Sched. 9, s. 104 - not in force

PART I APPLICATION

Crown and other Acts

Crown

2 (1) This Act binds the Crown and applies to an employee in the service of the Crown or an agency, board, commission or corporation that exercises any function assigned or delegated to it by the Crown.

Other Acts

(2) Despite anything in any general or special Act, the provisions of this Act and the regulations prevail. R.S.O. 1990, c. O.1, s. 2.

Private residences, farming, teaching

Private residences

3 (1) This Act does not apply to work performed by the owner or occupant or a servant of the owner or occupant to, in or about a private residence or the lands and appurtenances used in connection therewith.

Farming operations

(2) Except as is prescribed and subject to the conditions and limitations prescribed, this Act or a Part thereof does not apply to farming operations.

Teachers, etc.

(3) Except as is prescribed and subject to the conditions and limitations prescribed, this Act or a Part thereof does not apply to,

- (a) a person who is employed as a teacher as defined in the *Education Act*; or
- (b) a person who is employed as a member or teaching assistant of the academic staff of a university or a related institution. R.S.O. 1990, c. O.1, s. 3.

Self-employed persons

4 Subsection 25 (1), clauses 26 (1) (c), (e), (f) and (g), subsection 33 (1) and sections 37, 38, 39, 40, 41, 51, 52, 54, 57, 59, 60, 61, 62, 66, 67, 68 and 69, and the regulations in relation thereto, apply with necessary modifications to a self-employed person. 2001, c. 9, Sched. I, s. 3 (1).

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (1) - 29/06/2001; 2001, c. 9, Sched. I, s. 3 (2) - See: Table of Public Statute Provisions Repealed Under Section 10.1 of the Legislation Act, 2006 - 31/12/2011

PART II ADMINISTRATION

Administration of Act

4.1 (1) The Minister is responsible for the administration of this Act. 2011, c. 11, s. 2.

Powers of Minister

(2) In administering this Act, the Minister's powers and duties include the following:

1. To promote occupational health and safety and to promote the prevention of workplace injuries and occupational diseases.
2. To promote public awareness of occupational health and safety.
3. To educate employers, workers and other persons about occupational health and safety.
4. To foster a commitment to occupational health and safety among employers, workers and others.
5. To make grants, in such amounts and on such terms as the Minister considers advisable, to support occupational health and safety.

2011, c. 11, s. 2.

Duty to consider

(3) In administering this Act, the Minister shall consider advice that is provided to the Minister under this Act. 2011, c. 11, s. 2.

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 2 - 1/04/2012

Delegation of powers

5 Where under this Act or the regulations any power or duty is granted to or vested in the Minister or the Deputy Minister, the Minister or Deputy Minister may in writing delegate that power or duty from time to time to any employee in the Ministry subject to such limitations, restrictions, conditions and requirements as the Minister or Deputy Minister may set out in the delegation. R.S.O. 1990, c. O.1, s. 5; 2006, c. 35, Sched. C, s. 93 (1).

Section Amendments with date in force (d/m/y)

2006, c. 35, Sched. C, s. 93 (1) - 20/08/2007

Appointment of inspectors and Directors

6 (1) Such persons as may be necessary to administer and enforce this Act and the regulations may be appointed as inspectors by the Deputy Minister and the Deputy Minister may designate one or more of the inspectors as a Director or Directors.

Director may act as inspector

(2) A Director may exercise any of the powers or perform any of the duties of an inspector under this Act or the regulations. R.S.O. 1990, c. O.1, s. 6.

Certificate of appointment

7 (1) The Deputy Minister shall issue a certificate of appointment, bearing his or her signature or a facsimile thereof, to every inspector.

Production of certificate

(2) Every inspector, in the exercise of any powers or duties under this Act, shall produce his or her certificate of appointment upon request. R.S.O. 1990, c. O.1, s. 7.

Standards – training programs

7.1 (1) The Chief Prevention Officer may establish standards for training

programs required under this Act or the regulations. 2011, c. 11, s. 3.

Approval — training program

(2) The Chief Prevention Officer may approve a training program that is established before or after this subsection comes into force if the training program meets the standards established under subsection (1). 2011, c. 11, s. 3.

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 3 - 1/06/2011

Standards — persons who provide training

7.2 (1) The Chief Prevention Officer may establish standards that a person shall meet in order to become an approved training provider. 2011, c. 11, s. 3.

Approval — persons who provide training

(2) The Chief Prevention Officer may approve a person who meets the standards described in subsection (1) as a training provider with respect to one or more approved training programs. 2011, c. 11, s. 3.

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 3 - 1/06/2011

Amendment of standard

7.3 (1) The Chief Prevention Officer may amend a standard established under subsection 7.1 (1) or 7.2 (1). 2011, c. 11, s. 3.

Publication of standards

(2) The Chief Prevention Officer shall publish the standards established under subsections 7.1 (1) and 7.2 (1) promptly after establishing or amending them. 2011, c. 11, s. 3.

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 3 - 1/06/2011

Validity of approval

7.4 (1) An approval given under subsection 7.1 (2) or 7.2 (2) is valid for the period that the Chief Prevention Officer specifies in the approval. 2011, c. 11, s. 3.

Revocation, etc., of approval

(2) The Chief Prevention Officer may revoke or amend an approval given under subsection 7.1 (2) or 7.2 (2). 2011, c. 11, s. 3.

Information to be provided to Chief Prevention Officer

(3) The Chief Prevention Officer may require any person who is seeking an approval or is the subject of an approval under subsection 7.1 (2) or 7.2 (2) to provide the Chief Prevention Officer with whatever information, records or accounts he or she may require pertaining to the approval and the Chief Prevention Officer may make such inquiries and examinations as he or she considers necessary. 2011, c. 11, s. 3.

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 3 - 1/06/2011

Collection and use of training information

7.5 (1) The Chief Prevention Officer may collect information about a worker's successful completion of an approved training program for the purpose of maintaining a record of workers who have successfully completed approved training programs. 2011, c. 11, s. 3.

Disclosure by training provider

(2) The Chief Prevention Officer may require an approved training provider to disclose to him or her the information described in subsection (1). 2011, c. 11, s. 3.

Same

(3) The Chief Prevention Officer may specify the time at which, and the form in which, the information shall be provided. 2011, c. 11, s. 3.

Disclosure by Chief Prevention Officer

(4) The Chief Prevention Officer may disclose information collected under subsection (1) to any person, including but not limited to a current or potential employer of a worker, if the worker consents to the disclosure. 2011, c. 11, s. 3.

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 3 - 1/06/2011

Certification of members

7.6 (1) The Chief Prevention Officer may,

- (a) establish training and other requirements that a committee member shall fulfil in order to become a certified member; and
- (b) certify a committee member who fulfils the requirements described in clause (a). 2011, c. 11, s. 4.

Transition

(2) A person who is certified under paragraph 5 of subsection 4 (1) of the *Workplace Safety and Insurance Act, 1997* on the date section 20 of the *Occupational Health and Safety Statute Law Amendment Act, 2011* comes into force is deemed to be certified under this section. 2011, c. 11, s. 4.

Amendment

(3) The Chief Prevention Officer may amend training and other requirements established under clause (1) (a). 2019, c. 9, Sched. 10, s. 1.

Conditions

(4) The Chief Prevention Officer may establish conditions that a committee member certified under clause (1) (b) must meet in order to maintain their certification. 2019, c. 9, Sched. 10, s. 1.

Validity of certification

(5) A certification granted under clause (1) (b) is valid for the period that the Chief Prevention Officer specifies in the certification. 2019, c. 9, Sched. 10, s. 1.

Revocation, etc., of certification

(6) The Chief Prevention Officer may revoke or amend a certification granted under clause (1) (b). 2019, c. 9, Sched. 10, s. 1.

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 4 - 1/04/2012

2019, c. 9, Sched. 10, s. 1 - 06/06/2019

Accreditation of health and safety management systems

7.6.1 (1) The Chief Prevention Officer may accredit a health and safety management system if the system meets any applicable standards established under subsection (2). 2016, c. 37, Sched. 16, s. 2.

Standards

(2) The Chief Prevention Officer may establish standards that a health and safety management system must meet in order to become an accredited

health and safety management system. 2016, c. 37, Sched. 16, s. 2.

Amendment

(3) The Chief Prevention Officer may amend standards established under subsection (2). 2016, c. 37, Sched. 16, s. 2.

Section Amendments with date in force (d/m/y)

2016, c. 37, Sched. 16, s. 2 - 08/12/2016

Recognition of employers

7.6.2 (1) The Chief Prevention Officer may give recognition to an employer in respect of one or more of its workplaces, upon the employer's application, if,

- (a) the employer satisfies the Chief Prevention Officer that it is a certified user of an accredited health and safety management system in its workplace or workplaces; and
- (b) the employer meets any applicable criteria established under subsection (2). 2016, c. 37, Sched. 16, s. 2.

Criteria

(2) The Chief Prevention Officer may establish criteria that an employer must meet for the purposes of clause (1) (b). 2016, c. 37, Sched. 16, s. 2.

Amendment

(3) The Chief Prevention Officer may amend criteria established under subsection (2). 2016, c. 37, Sched. 16, s. 2.

Section Amendments with date in force (d/m/y)

2016, c. 37, Sched. 16, s. 2 - 08/12/2016

Validity of accreditations, recognitions

7.6.3 (1) An accreditation given under subsection 7.6.1 (1) or a recognition given under subsection 7.6.2 (1) is valid for the period that the Chief Prevention Officer specifies in the accreditation or recognition. 2016, c. 37, Sched. 16, s. 2.

Revocation, etc., of accreditations, recognitions

(2) The Chief Prevention Officer may revoke or amend an accreditation or recognition. 2016, c. 37, Sched. 16, s. 2.

Section Amendments with date in force (d/m/y)

2016, c. 37, Sched. 16, s. 2 - 08/12/2016

Information re accreditations, recognitions

7.6.4 (1) The Chief Prevention Officer may require any person who is seeking an accreditation under subsection 7.6.1 (1) or recognition under subsection 7.6.2 (1), or who is the subject of an accreditation or recognition, to provide the Chief Prevention Officer with whatever information, records or accounts he or she may require pertaining to the accreditation or recognition and the Chief Prevention Officer may make such inquiries and examinations as he or she considers necessary. 2016, c. 37, Sched. 16, s. 2.

Disclosure by Director

(2) A Director may communicate or allow to be communicated or disclosed any information that was collected under the authority of this Act or the regulations to the Chief Prevention Officer or to a delegate for the purposes of determining whether the employer should receive recognition or should keep such recognition. 2016, c. 37, Sched. 16, s. 2.

Same

(3) Any disclosure of personal information that is authorized under subsection (2) shall be deemed to be in compliance with clause 42 (1) (d) of the *Freedom of Information and Protection of Privacy Act*. 2016, c. 37, Sched. 16, s. 2.

Section Amendments with date in force (d/m/y)

2016, c. 37, Sched. 16, s. 2 - 08/12/2016

Publication

7.6.5 (1) The Chief Prevention Officer may publish or otherwise make available to the public information relating to health and safety management systems accredited under subsection 7.6.1 (1) and employers given recognition under subsection 7.6.2 (1), including the names of the systems and employers. 2016, c. 37, Sched. 16, s. 2.

Same

(2) The Chief Prevention Officer shall publish the standards for accreditation of health and safety management systems and the criteria for recognition of employers promptly after establishing or amending them. 2016, c. 37, Sched. 16, s. 2.

Section Amendments with date in force (d/m/y)

2016, c. 37, Sched. 16, s. 2 - 08/12/2016

Delegation

7.7 The Chief Prevention Officer may delegate, in writing, any of his or her powers or duties under subsections 7.1 (2) and 7.2 (2), sections 7.4 and 7.5, clause 7.6 (1) (b), subsections 7.6 (5) and (6), 7.6.1 (1) and 7.6.2 (1), sections 7.6.3 and 7.6.4 and subsection 7.6.5 (1) to any person, including any person outside the Ministry, subject to such limitations, restrictions, conditions and requirements as the Chief Prevention Officer may set out in the delegation. 2016, c. 37, Sched. 16, s. 3; 2019, c. 9, Sched. 10, s. 2.

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 5 - 1/06/2011

2016, c. 37, Sched. 16, s. 3 - 08/12/2016

2019, c. 9, Sched. 10, s. 2 - 06/06/2019

Mandatory selection of health and safety representative

8 (1) At a project or other workplace where no committee is required under section 9 and where the number of workers regularly exceeds five, the constructor or employer shall cause the workers to select at least one health and safety representative from among the workers at the workplace who do not exercise managerial functions. R.S.O. 1990, c. O.1, s. 8 (1).

Order appointing health and safety representatives

(2) If no health and safety representative is required under subsection (1) and no committee is required under section 9 for a workplace, the Minister may, by order in writing, require a constructor or employer to cause the workers to select one or more health and safety representatives from among the workers at the workplace or part thereof who do not exercise managerial functions, and may provide in the order for the qualifications of such representatives. R.S.O. 1990, c. O.1, s. 8 (2).

Idem

(3) The Minister may from time to time give such directions as the Minister considers advisable concerning the carrying out of the functions of a health and safety representative. R.S.O. 1990, c. O.1, s. 8 (3).

What Minister shall consider

(4) In exercising the power conferred by subsection (2), the Minister shall consider the matters set out in subsection 9 (5). R.S.O. 1990, c. O.1, s. 8 (4).

Selection of representatives

(5) The selection of a health and safety representative shall be made by those workers who do not exercise managerial functions and who will be represented by the health and safety representative in the workplace, or the part or parts thereof, as the case may be, or, where there is a trade union or trade unions representing such workers, by the trade union or trade unions. R.S.O. 1990, c. O.1, s. 8 (5).

Inspections

(6) Unless otherwise required by the regulations or by an order by an inspector, a health and safety representative shall inspect the physical condition of the workplace at least once a month. R.S.O. 1990, c. O.1, s. 8 (6).

Idem

(7) If it is not practical to inspect the workplace at least once a month, the health and safety representative shall inspect the physical condition of the workplace at least once a year, inspecting at least a part of the workplace in each month. R.S.O. 1990, c. O.1, s. 8 (7).

Schedule of inspections

(8) The inspection required by subsection (7) shall be undertaken in accordance with a schedule agreed upon by the constructor or employer and the health and safety representative. R.S.O. 1990, c. O.1, s. 8 (8).

Inspections

(9) The constructor, employer and workers shall provide a health and safety representative with such information and assistance as the member may require for the purpose of carrying out an inspection of the workplace. R.S.O. 1990, c. O.1, s. 8 (9).

Idem

(10) A health and safety representative has power to identify situations that may be a source of danger or hazard to workers and to make recommendations or report his or her findings thereon to the employer, the workers and the trade union or trade unions representing the workers. R.S.O. 1990, c. O.1, s. 8 (10).

Powers of representative

(11) A health and safety representative has the power,

- (a) to obtain information from the constructor or employer concerning

the conducting or taking of tests of any equipment, machine, device, article, thing, material or biological, chemical or physical agent in or about a workplace for the purpose of occupational health and safety;

- (b) to be consulted about, and be present at the beginning of, testing referred to in clause (a) conducted in or about the workplace if the representative believes his or her presence is required to ensure that valid testing procedures are used or to ensure that the test results are valid; and
- (c) to obtain information from the constructor or employer respecting,
 - (i) the identification of potential or existing hazards of materials, processes or equipment, and
 - (ii) health and safety experience and work practices and standards in similar or other industries of which the constructor or employer has knowledge. R.S.O. 1990, c. O.1, s. 8 (11).

Response to recommendations

(12) A constructor or employer who receives written recommendations from a health and safety representative shall respond in writing within twenty-one days. R.S.O. 1990, c. O.1, s. 8 (12).

Idem

(13) A response of a constructor or employer under subsection (12) shall contain a timetable for implementing the recommendations the constructor or employer agrees with and give reasons why the constructor or employer disagrees with any recommendations that the constructor or employer does not accept. R.S.O. 1990, c. O.1, s. 8 (13).

Notice of accident, inspection by representative

(14) Where a person is killed or critically injured at a workplace from any cause, the health and safety representative may, subject to subsection 51 (2), inspect the place where the accident occurred and any machine, device or thing, and shall report his or her findings in writing to a Director. R.S.O. 1990, c. O.1, s. 8 (14).

Entitlement to time from work

(15) A health and safety representative is entitled to take such time from work as is necessary to carry out his or her duties under subsections (6) and (14) and the time so spent shall be deemed to be work time for which the representative shall be paid by his or her employer at the representative's regular or premium rate as may be proper. R.S.O. 1990,

c. O.1, s. 8 (15).

Additional powers of certain health and safety representatives

(16) A health and safety representative or representatives of like nature appointed or selected under the provisions of a collective agreement or other agreement or arrangement between the constructor or the employer and the workers, has, in addition to his or her functions and powers under the provisions of the collective agreement or other agreement or arrangement, the functions and powers conferred upon a health and safety representative by this section. R.S.O. 1990, c. O.1, s. 8 (16).

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 6 - not in force

Joint health and safety committee

Application

- 9 (1) Subject to subsection (3), this section does not apply,
- (a) to a constructor at a project at which work is expected to last less than three months; or
 - (b) to a prescribed employer or workplace or class of employers or workplaces. R.S.O. 1990, c. O.1, s. 9 (1).

Joint health and safety committee

- (2) A joint health and safety committee is required,
- (a) at a workplace at which twenty or more workers are regularly employed;
 - (b) at a workplace with respect to which an order to an employer is in effect under section 33; or
 - (c) at a workplace, other than a construction project where fewer than twenty workers are regularly employed, with respect to which a regulation concerning designated substances applies. R.S.O. 1990, c. O.1, s. 9 (2).

Minister's order

(3) Despite subsections (1) and (2), the Minister may, by order in writing, require a constructor or an employer to establish and maintain one or more joint health and safety committees for a workplace or a part thereof, and may, in such order, provide for the composition, practice and

procedure of any committee so established. R.S.O. 1990, c. O.1, s. 9 (3).

Same

(3.1) Despite subsections (1) and (2), the Minister may, by order in writing, permit a constructor or an employer to establish and maintain one joint health and safety committee for more than one workplace or parts thereof, and may, in the order, provide for the composition, practice and procedure of any committee so established. 1994, c. 27, s. 120 (1).

Same

(3.2) In an order under subsection (3.1), the Minister may,

- (a) provide that the members of a committee who represent workers may designate a worker at a workplace who is not a member of the committee to inspect the physical condition of the workplace under subsection 9 (23) and to exercise a committee member's rights and responsibilities under clause 43 (4) (a) and subsections 43 (7), (11) and (12); and
- (b) require the employer to provide training to the worker to enable the worker to adequately perform the tasks or exercise the rights and responsibilities delegated by the committee. 2001, c. 9, Sched. I, s. 3 (3).

Same

(3.3) If a worker is designated under clause (3.2) (a), the following apply:

1. The designated worker shall comply with this section as if the worker were a committee member while exercising a committee member's rights and responsibilities.
2. Subsections 9 (35) and 43 (13), section 55, clauses 62 (5) (a) and (b) and subsection 65 (1) apply to the designated worker as if the worker were a committee member while the worker exercises a committee member's rights and responsibilities.
3. The worker does not become a member of the committee as a result of the designation. 2001, c. 9, Sched. I, s. 3 (3).

Establishment of committee

(4) The constructor or employer shall cause a joint health and safety committee to be established and maintained at the workplace unless the Minister is satisfied that a committee of like nature or an arrangement, program or system in which the workers participate was, on the 1st day of October, 1979, established and maintained pursuant to a collective

agreement or other agreement or arrangement and that such committee, arrangement, program or system provides benefits for the health and safety of the workers equal to, or greater than, the benefits to be derived under a committee established under this section. R.S.O. 1990, c. O.1, s. 9 (4); 1993, c. 27, Sched.

What Minister shall consider

(5) In exercising the power conferred by subsection (3) or (3.1), the Minister shall consider,

- (a) the nature of the work being done;
- (b) the request of a constructor, an employer, a group of the workers or the trade union or trade unions representing the workers in a workplace;
- (c) the frequency of illness or injury in the workplace or in the industry of which the constructor or employer is a part;
- (d) the existence of health and safety programs and procedures in the workplace and the effectiveness thereof; and
- (e) such other matters as the Minister considers advisable. R.S.O. 1990, c. O.1, s. 9 (5); 1994, c. 27, s. 120 (2).

Composition of committee

(6) A committee shall consist of,

- (a) at least two persons, for a workplace where fewer than fifty workers are regularly employed; or
- (b) at least four persons or such greater number of people as may be prescribed, for a workplace where fifty or more workers are regularly employed. R.S.O. 1990, c. O.1, s. 9 (6).

Idem

(7) At least half the members of a committee shall be workers employed at the workplace who do not exercise managerial functions. R.S.O. 1990, c. O.1, s. 9 (7).

Selection of members

(8) The members of a committee who represent workers shall be selected by the workers they are to represent or, if a trade union or unions represent the workers, by the trade union or unions. R.S.O. 1990, c. O.1, s. 9 (8).

Idem

(9) The constructor or employer shall select the remaining members of a committee from among persons who exercise managerial functions for the constructor or employer and, to the extent possible, who do so at the workplace. R.S.O. 1990, c. O.1, s. 9 (9).

Requirement for committee membership

(10) A member of the committee who ceases to be employed at the workplace ceases to be a member of the committee. R.S.O. 1990, c. O.1, s. 9 (10).

Committee to be co-chaired

(11) Two of the members of a committee shall co-chair the committee, one of whom shall be selected by the members who represent workers and the other of whom shall be selected by the members who exercise managerial functions. R.S.O. 1990, c. O.1, s. 9 (11).

Certification requirement

(12) Unless otherwise prescribed, a constructor or employer shall ensure that at least one member of the committee representing the constructor or employer and at least one member representing workers are certified members. R.S.O. 1990, c. O.1, s. 9 (12).

Idem

(13) Subsection (12) does not apply with respect to a project where fewer than fifty workers are regularly employed or that is expected to last less than three months. R.S.O. 1990, c. O.1, s. 9 (13).

Designation of member to be certified

(14) If no member representing workers is a certified member, the workers or the trade unions who selected the members representing workers shall select from among them one or more who are to become certified. R.S.O. 1990, c. O.1, s. 9 (14).

Designation of certified members

(15) If there is more than one certified member representing workers, the workers or the trade unions who selected the members representing workers shall designate one or more certified members who then become solely entitled to exercise the rights and required to perform the duties under this Act of a certified member representing workers. R.S.O. 1990, c. O.1, s. 9 (15).

Idem

(16) If there is more than one certified member representing the constructor or employer, the constructor or employer shall designate one or more of them who then become solely entitled to exercise the rights and required to perform the duties under this Act of a certified member representing a constructor or an employer. R.S.O. 1990, c. O.1, s. 9 (16).

Replacement of certified member

(17) If a certified member resigns or is unable to act, the constructor or employer shall, within a reasonable time, take all steps necessary to ensure that the requirement set out in subsection (12) is met. R.S.O. 1990, c. O.1, s. 9 (17).

Powers of committee

(18) It is the function of a committee and it has power to,

- (a) identify situations that may be a source of danger or hazard to workers;
- (b) make recommendations to the constructor or employer and the workers for the improvement of the health and safety of workers;
- (c) recommend to the constructor or employer and the workers the establishment, maintenance and monitoring of programs, measures and procedures respecting the health or safety of workers;
- (d) obtain information from the constructor or employer respecting,
 - (i) the identification of potential or existing hazards of materials, processes or equipment, and
 - (ii) health and safety experience and work practices and standards in similar or other industries of which the constructor or employer has knowledge;
- (e) obtain information from the constructor or employer concerning the conducting or taking of tests of any equipment, machine, device, article, thing, material or biological, chemical or physical agent in or about a workplace for the purpose of occupational health and safety; and
- (f) be consulted about, and have a designated member representing workers be present at the beginning of, testing referred to in clause (e) conducted in or about the workplace if the designated member believes his or her presence is required to ensure that valid testing

procedures are used or to ensure that the test results are valid. R.S.O. 1990, c. O.1, s. 9 (18).

Idem

(19) The members of the committee who represent workers shall designate one of them who is entitled to be present at the beginning of testing described in clause (18) (f). R.S.O. 1990, c. O.1, s. 9 (19).

Powers of co-chairs

(19.1) If the committee has failed to reach consensus about making recommendations under subsection (18) after attempting in good faith to do so, either co-chair of the committee has the power to make written recommendations to the constructor or employer. 2011, c. 11, s. 7 (1).

Response to recommendations

(20) A constructor or employer who receives written recommendations from a committee or co-chair shall respond in writing within twenty-one days. R.S.O. 1990, c. O.1, s. 9 (20); 2011, c. 11, s. 7 (2).

Idem

(21) A response of a constructor or employer under subsection (20) shall contain a timetable for implementing the recommendations the constructor or employer agrees with and give reasons why the constructor or employer disagrees with any recommendations that the constructor or employer does not accept. R.S.O. 1990, c. O.1, s. 9 (21).

Minutes of proceedings

(22) A committee shall maintain and keep minutes of its proceedings and make the same available for examination and review by an inspector. R.S.O. 1990, c. O.1, s. 9 (22).

Inspections

(23) Subject to subsection (24), the members of a committee who represent workers shall designate a member representing workers to inspect the physical condition of the workplace. R.S.O. 1990, c. O.1, s. 9 (23).

Idem

(24) If possible, the member designated under subsection (23) shall be a certified member. R.S.O. 1990, c. O.1, s. 9 (24).

Idem

(25) The members of a committee are not required to designate the same member to perform all inspections or to perform all of a particular inspection. R.S.O. 1990, c. O.1, s. 9 (25).

Idem

(26) Unless otherwise required by the regulations or by an order by an inspector, a member designated under subsection (23) shall inspect the physical condition of the workplace at least once a month. R.S.O. 1990, c. O.1, s. 9 (26).

Idem

(27) If it is not practical to inspect the workplace at least once a month, the member designated under subsection (23) shall inspect the physical condition of the workplace at least once a year, inspecting at least a part of the workplace in each month. R.S.O. 1990, c. O.1, s. 9 (27).

Schedule of inspections

(28) The inspection required by subsection (27) shall be undertaken in accordance with a schedule established by the committee. R.S.O. 1990, c. O.1, s. 9 (28).

Inspections

(29) The constructor, employer and the workers shall provide a member designated under subsection (23) with such information and assistance as the member may require for the purpose of carrying out an inspection of the workplace. R.S.O. 1990, c. O.1, s. 9 (29).

Information reported to the committee

(30) The member shall inform the committee of situations that may be a source of danger or hazard to workers and the committee shall consider such information within a reasonable period of time. R.S.O. 1990, c. O.1, s. 9 (30).

Idem

(31) The members of a committee who represent workers shall designate one or more such members to investigate cases where a worker is killed or critically injured at a workplace from any cause and one of those members may, subject to subsection 51 (2), inspect the place where the accident occurred and any machine, device or thing, and shall report his or her findings to a Director and to the committee. R.S.O. 1990, c. O.1, s. 9 (31).

Posting of names and work locations

(32) A constructor or an employer required to establish a committee under this section shall post and keep posted at the workplace the names and work locations of the committee members in a conspicuous place or places where they are most likely to come to the attention of the workers. R.S.O. 1990, c. O.1, s. 9 (32).

Meetings

(33) A committee shall meet at least once every three months at the workplace and may be required to meet by order of the Minister. R.S.O. 1990, c. O.1, s. 9 (33).

Entitlement to time from work

(34) A member of a committee is entitled to,

- (a) one hour or such longer period of time as the committee determines is necessary to prepare for each committee meeting;
- (b) such time as is necessary to attend meetings of the committee; and
- (c) such time as is necessary to carry out the member's duties under subsections (26), (27) and (31). R.S.O. 1990, c. O.1, s. 9 (34).

Entitlement to be paid

(35) A member of a committee shall be deemed to be at work during the times described in subsection (34) and the member's employer shall pay the member for those times at the member's regular or premium rate as may be proper. R.S.O. 1990, c. O.1, s. 9 (35).

Idem

(36) A member of a committee shall be deemed to be at work while the member is fulfilling the requirements for becoming a certified member and the member's employer shall pay the member for the time spent at the member's regular or premium rate as may be proper. R.S.O. 1990, c. O.1, s. 9 (36); 1998, c. 8, s. 50 (1); 2011, c. 11, s. 7 (3).

Exception

(37) Subsection (36) does not apply with respect to workers who are paid by the Workplace Safety and Insurance Board for the time spent fulfilling the requirements for becoming certified. R.S.O. 1990, c. O.1, s. 9 (37); 1998, c. 8, s. 50 (2).

Additional powers of certain committees

(38) Any committee of a like nature to a committee established under this section in existence in a workplace under the provisions of a collective agreement or other agreement or arrangement between a constructor or an employer and the workers has, in addition to its functions and powers under the provisions of the collective agreement or other agreement or arrangement, the functions and powers conferred upon a committee by this section. R.S.O. 1990, c. O.1, s. 9 (38).

Dispute resolution

(39) Where a dispute arises as to the application of subsection (2), or the compliance or purported compliance therewith by a constructor or an employer, the dispute shall be decided by the Minister after consulting the constructor or the employer and the workers or the trade union or trade unions representing the workers. R.S.O. 1990, c. O.1, s. 9 (39).

Section Amendments with date in force (d/m/y)

1993, c. 27, Sched. - 31/12/1991; 1994, c. 27, s. 120 (1, 2) - 9/12/1994; 1998, c. 8, s. 50 (1, 2) - 29/06/1998

2001, c. 9, Sched. I, s. 3 (3) - 29/06/2001

2011, c. 11, s. 7 (1-3) - 1/04/2012

Worker trades committee

10 (1) If a committee is required at a project, other than a project where fewer than fifty workers are regularly employed or that is expected to last less than three months, the committee shall establish a worker trades committee for the project.

Committee membership

(2) The members of a worker trades committee shall represent workers employed in each of the trades at the workplace.

Selection of members

(3) The members of a worker trades committee shall be selected by the workers employed in the trades the members are to represent or, if a trade union represents the workers, by the trade union.

Function of worker trades committee

(4) It is the function of a worker trades committee to inform the committee at the workplace of the health and safety concerns of the workers employed in the trades at the workplace.

Entitlement to time from work

(5) Subject to subsection (6), a member of a worker trades committee is entitled to such time from work as is necessary to attend meetings of the worker trades committee and the time so spent shall be deemed to be work time for which the member shall be paid by the employer at the member's regular or premium rate as may be proper.

Committee to determine maximum entitlement

(6) The committee for a workplace shall determine the maximum amount of time for which members of a worker trades committee for the workplace are entitled to be paid under subsection (5) for each meeting of the worker trades committee. R.S.O. 1990, c. O.1, s. 10.

Consultation on industrial hygiene testing

11 (1) The constructor or employer at a workplace shall consult a health and safety representative or the committee with respect to proposed testing strategies for investigating industrial hygiene at the workplace.

Information

(2) The constructor or employer shall provide information to a health and safety representative or the committee concerning testing strategies to be used to investigate industrial hygiene at the workplace.

Attendance at testing

(3) A health and safety representative or a designated committee member representing workers at a workplace is entitled to be present at the beginning of testing conducted with respect to industrial hygiene at the workplace if the representative or member believes his or her presence is required to ensure that valid testing procedures are used or to ensure that the test results are valid.

Designation of member

(4) The committee members representing workers shall designate one of them for the purpose of subsection (3). R.S.O. 1990, c. O.1, s. 11.

Summary to be furnished

12 (1) For workplaces to which the insurance plan established under the *Workplace Safety and Insurance Act, 1997* applies, the Workplace Safety and Insurance Board, upon the request of an employer, a worker, committee, health and safety representative or trade union, shall send to the employer, and to the worker, committee, health and safety representative or trade union requesting the information an annual

summary of data relating to the employer in respect of the number of work accident fatalities, the number of lost work day cases, the number of lost work days, the number of non-fatal cases that required medical aid without lost work days, the incidence of occupational illnesses, the number of occupational injuries, and such other data as the Board may consider necessary or advisable. R.S.O. 1990, c. O.1, s. 12 (1); 1997, c. 16, s. 2 (4).

Posting of copy of summary

(2) Upon receipt of the annual summary, the employer shall cause a copy thereof to be posted in a conspicuous place or places at the workplace where it is most likely to come to the attention of the workers.

Director to provide information

(3) A Director shall, in accordance with the objects and purposes of this Act, ensure that persons and organizations concerned with the purposes of this Act are provided with information and advice pertaining to its administration and to the protection of the occupational health and occupational safety of workers generally. R.S.O. 1990, c. O.1, s. 12 (2, 3).

Section Amendments with date in force (d/m/y)

1997, c. 16, s. 2 (4) - 1/01/1998

13 Repealed: 1997, c. 16, s. 2 (5).

Section Amendments with date in force (d/m/y)

1997, c. 16, s. 2 (5) - 1/01/1998

14 Repealed: 1997, c. 16, s. 2 (6).

Section Amendments with date in force (d/m/y)

1997, c. 16, s. 2 (6) - 1/01/1998

15 Repealed: 1997, c. 16, s. 2 (7).

Section Amendments with date in force (d/m/y)

1997, c. 16, s. 2 (7) - 1/01/1998

16 Repealed: 1997, c. 16, s. 2 (8).

Section Amendments with date in force (d/m/y)

1997, c. 16, s. 2 (8) - 1/01/1998

17 Repealed: 1997, c. 16, s. 2 (9).

Section Amendments with date in force (d/m/y)

1997, c. 16, s. 2 (9) - 1/01/1998

18 Repealed: 1997, c. 16, s. 2 (10).

Section Amendments with date in force (d/m/y)

1997, c. 16, s. 2 (10) - 1/01/1998

19 Repealed: 1997, c. 16, s. 2 (10).

Section Amendments with date in force (d/m/y)

1997, c. 16, s. 2 (10) - 1/01/1998

Testimony in civil proceedings, etc.

20 (1) Except with the consent of the Board, no member of the Board, nor its registrar, nor any of its other officers, nor any of its clerks or servants shall be required to give testimony in any civil proceeding or in any proceeding before the Board or in any proceeding before any other tribunal respecting information obtained in the discharge of their duties or while acting within the scope of their employment under this Act.

Non-disclosure

(2) No information or material furnished to or received by a labour relations officer under this Act shall be disclosed except to the Board or as authorized by the Board. 1998, c. 8, s. 51.

Section Amendments with date in force (d/m/y)

1998, c. 8, s. 51 - 29/06/1998

Advisory committees

21 (1) The Minister may appoint committees, which are not committees as defined in subsection 1 (1), or persons to assist or advise the Minister on any matter arising under this Act or to inquire into and report to the Minister on any matter that the Minister considers advisable. R.S.O. 1990, c. O.1, s. 21 (1).

Remuneration and expenses

(2) Any person appointed under subsection (1) who is not a public servant within the meaning of the *Public Service of Ontario Act, 2006* may be paid such remuneration and expenses as may be from time to time fixed by the Lieutenant Governor in Council. R.S.O. 1990, c. O.1, s. 21 (2); 2006, c. 35, Sched. C, s. 93 (2).

Section Amendments with date in force (d/m/y)

2006, c. 35, Sched. C, s. 93 (2) - 20/08/2007

Contribution to defray cost

22 (1) The Workplace Safety and Insurance Board shall require Schedule 1 and Schedule 2 employers under the *Workplace Safety and Insurance Act, 1997* to make payments to defray the cost of administering this Act and the regulations. The Lieutenant Governor in Council may fix the total payment to be made by all employers for that purpose.

Same

(2) The Workplace Safety and Insurance Board shall remit the money collected from employers under this section to the Minister of Finance. 1997, c. 16, s. 2 (11).

Section Amendments with date in force (d/m/y)

1997, c. 16, s. 2 (11) - 1/04/1997

Powers under federal legislation

22.1 (1) If a regulation under the *Canada Labour Code* incorporates by reference all or part of this Act or the regulations made under it, the Board and any person having powers under this Act may exercise any powers conferred by the regulation under the *Canada Labour Code*. 2011, c. 1, Sched. 7, s. 2 (1).

Same

(2) If a regulation under section 44 of the *Nuclear Safety and Control Act* (Canada) requires an employer to whom this Act applies to comply with all or part of this Act or the regulations made under it, the Board and any person having powers under this Act may exercise any powers conferred by the regulation under the *Nuclear Safety and Control Act* (Canada). 2011, c. 1, Sched. 7, s. 2 (1).

Section Amendments with date in force (d/m/y)

1998, c. 8, s.52 - 29/06/1998

2011, c. 1, Sched. 7, s. 2 (1) - 30/03/2011

Part II.1**Prevention Council, Chief Prevention Officer and designated entities**

PREVENTION COUNCIL

22.2 (1) The Minister shall establish a council to be known as the Prevention Council in English and Conseil de la prévention in French. 2011, c. 11, s. 8 (1).

Composition

(2) The Council shall be composed of such members as the Minister may appoint, and shall include representatives from each of the following groups:

1. Trade unions and provincial labour organizations.
2. Employers.
3. Non-unionized workers, the Workplace Safety and Insurance Board and persons with occupational health and safety expertise. 2011, c. 11, s. 8 (1).

Same

- (3) In appointing members of the Council, the Minister shall ensure that,
- (a) an equal number of members are appointed to represent the groups described in paragraphs 1 and 2 of subsection (2); and
 - (b) the group described in paragraph 3 of subsection (2) is represented by not more than one-third of the members of the Council. 2011, c. 11, s. 8 (1).

Appointment of members

(4) The members of the Council shall be appointed for such term as may be determined by the Minister. 2011, c. 11, s. 8 (1).

Chair

(5) The members of the Council shall choose a chair from among themselves by the date fixed by the Minister; if they fail to do so, the Minister shall designate a member as chair. 2011, c. 11, s. 8 (1).

Same

(6) Subsection (5) applies on the first appointment of members and thereafter whenever the office of chair is vacant. 2011, c. 11, s. 8 (1).

Functions

(7) The Council shall,

- (a) provide advice to the Minister on the appointment of a Chief Prevention Officer;
- (b) provide advice to the Chief Prevention Officer,
 - (i) on the prevention of workplace injuries and occupational diseases,
 - (ii) for the purposes of the provincial occupational health and safety strategy and the annual report under section 22.3, and
 - (iii) on any significant proposed changes to the funding and delivery of services for the prevention of workplace injuries and occupational diseases;
- (c) provide advice on any other matter specified by the Minister; and
- (d) perform such other functions as may be specified by the Minister. 2011, c. 11, s. 8 (1).

Advice

(8) For the purposes of subsection (7), any advice provided by the Council shall be communicated by the chair of the Council. 2011, c. 11, s. 8 (1).

Remuneration and expenses

(9) Any member of the Council who is not a public servant within the meaning of the *Public Service of Ontario Act, 2006* may be paid such remuneration and expenses as may be from time to time fixed by the Lieutenant Governor in Council. 2011, c. 11, s. 8 (1).

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 8 (1) - 1/06/2011

CHIEF PREVENTION OFFICER

Chief Prevention Officer

Functions

- 22.3** (1) The Minister shall appoint a Chief Prevention Officer to,
- (a) develop a provincial occupational health and safety strategy;
 - (b) prepare an annual report on occupational health and safety;
 - (c) exercise any power or duty delegated to him or her by the Minister under this Act;
 - (d) provide advice to the Minister on the prevention of workplace

injuries and occupational diseases;

- (e) provide advice to the Minister on any proposed changes to the funding and delivery of services for the prevention of workplace injuries and occupational diseases;
- (f) provide advice to the Minister on the establishment of standards for designated entities under section 22.5;
- (g) exercise the powers and perform the duties with respect to training that are set out in sections 7.1 to 7.5;
- (h) exercise the powers and perform the duties set out in section 7.6;
- (h.1) exercise the powers and perform the duties with respect to accreditation of health and safety management systems and recognition of employers that are set out in sections 7.6.1 to 7.6.5;
- (i) exercise the powers and perform the duties set out in section 22.7; and
- (j) exercise such other powers and perform such other duties as may be assigned to the Chief Prevention Officer under this Act. 2011, c. 11, s. 8 (1); 2016, c. 37, Sched. 16, s. 4; 2019, c. 9, Sched. 10, s. 3.

Appointment

(2) The Chief Prevention Officer may be appointed for a term not exceeding five years and may be reappointed for successive terms not exceeding five years each. 2011, c. 11, s. 8 (1).

Occupational health and safety strategy

(3) The Chief Prevention Officer shall develop a written provincial occupational health and safety strategy that includes,

- (a) a statement of occupational health and safety goals;
- (b) key performance indicators for measuring the achievement of the goals; and
- (c) any other matter specified by the Minister. 2011, c. 11, s. 8 (1).

Advice of Prevention Council

(4) The Chief Prevention Officer shall consult with the Prevention Council and shall consider its advice in developing the strategy. 2011, c. 11, s. 8 (1).

Strategy provided to Minister

(5) The Chief Prevention Officer shall provide the strategy to the Minister on or before a day specified by the Minister. 2011, c. 11, s. 8 (1).

Minister's approval

(6) The Minister may approve the strategy or refer it back to the Chief Prevention Officer for further consideration. 2011, c. 11, s. 8 (1).

Publication

(7) After approving the strategy, the Minister shall publish it promptly. 2011, c. 11, s. 8 (1).

Annual report

(8) The Chief Prevention Officer shall provide an annual written report to the Minister on occupational health and safety that includes a measurement of the achievement of the goals established in the strategy, and that contains such other information as the Minister may require. 2011, c. 11, s. 8 (1).

Advice of Prevention Council

(9) The Chief Prevention Officer shall consult with the Prevention Council and shall consider its advice in developing the report. 2011, c. 11, s. 8 (1).

Report provided to Minister

(10) The Chief Prevention Officer shall provide the annual report to the Minister on or before a day specified by the Minister. 2011, c. 11, s. 8 (1).

Publication

(11) The Minister shall publish the Chief Prevention Officer's report promptly. 2011, c. 11, s. 8 (1).

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 8 (1) - 1/06/2011

2016, c. 37, Sched. 16, s. 4 - 08/12/2016

2019, c. 9, Sched. 10, s. 3 - 06/06/2019

CHANGES TO FUNDING AND DELIVERY OF SERVICES**If Minister proposes change**

22.4 (1) If the Minister is considering a proposed change to the funding and delivery of services for the prevention of workplace injuries and

occupational diseases, the Minister shall determine whether the proposed change would be a significant change. 2011, c. 11, s. 8 (1).

If proposed change significant

(2) If the Minister determines that the proposed change is significant, the Minister shall seek advice from the Chief Prevention Officer with respect to the proposed change. 2011, c. 11, s. 8 (1).

If Chief Prevention Officer advising on change

(3) If the Chief Prevention Officer is considering providing advice to the Minister concerning a proposed change to the funding and delivery of services for the prevention of workplace injuries and occupational diseases, the Chief Prevention Officer shall determine whether the proposed change would be a significant change. 2011, c. 11, s. 8 (1).

Prevention Council endorsement

(4) If the Minister asks the Chief Prevention Officer for advice under subsection (2) or if the Chief Prevention Officer determines under subsection (3) that a proposed change would be a significant change, the Chief Prevention Officer shall,

- (a) ask the chair of the Prevention Council to state whether the Council endorses the proposed change; and
- (b) include that statement in the advice to the Minister. 2011, c. 11, s. 8 (1).

Matters to consider in determining if change is significant

(5) The Minister and the Chief Prevention Officer shall consider such matters as may be prescribed when determining whether a proposed change to the funding and delivery of services for the prevention of workplace injuries and occupational diseases would be a significant change. 2011, c. 11, s. 8 (1).

Regulation

(6) On the recommendation of the Minister, the Lieutenant Governor in Council may make regulations prescribing matters to be considered when determining whether a proposed change to the funding and delivery of services for the prevention of workplace injuries and occupational diseases would be a significant change. 2011, c. 11, s. 8 (1).

Same

(7) Before recommending to the Lieutenant Governor in Council that

a regulation be made under subsection (6), the Minister shall seek the advice of the Chief Prevention Officer and require the Chief Prevention Officer to seek the advice of the Prevention Council with respect to the matters to be prescribed. 2011, c. 11, s. 8 (1).

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 8 (1) - 1/06/2011

DESIGNATED ENTITIES

Eligible for grant

22.5 (1) An entity that is designated under this section is eligible for a grant from the Ministry. 2011, c. 11, s. 8 (2).

Designation by Minister

(2) The Minister may designate an entity as a safe workplace association or as a medical clinic or training centre specializing in occupational health and safety matters if the entity meets the standards established by the Minister. 2011, c. 11, s. 8 (2).

Standards

(3) The Minister may establish standards that an entity shall meet before it is eligible to be designated. 2011, c. 11, s. 8 (2).

Same

(4) The standards established under subsection (3) may address any matter the Minister considers appropriate, including governance, objectives, functions and operations. 2011, c. 11, s. 8 (2).

Same

(5) The Minister may establish different standards for associations, clinics or centres serving different industries or groups. 2011, c. 11, s. 8 (2).

Duty to comply

(6) A designated entity shall operate in accordance with the standards established under subsection (3) that apply to it, and in accordance with any other requirements imposed on it under section 22.6. 2011, c. 11, s. 8 (2).

Amendment of standard

(7) The Minister may amend a standard established under subsection (3). 2011, c. 11, s. 8 (2).

Date for compliance with amended standard

(8) If the Minister amends a standard established under subsection (3), the Minister shall establish a date by which designated entities to which the amended standard applies are required to comply with it. 2011, c. 11, s. 8 (2).

Publication of standards

(9) The Minister shall promptly publish,

- (a) the standards established under subsection (3); and
- (b) standards amended under subsection (7), together with the compliance date described in subsection (8). 2011, c. 11, s. 8 (2).

Transition

(10) When the Minister establishes and publishes standards under subsections (3) and (9) for the first time after the coming into force of subsection 8 (2) of the *Occupational Health and Safety Statute Law Amendment Act, 2011*, the Minister shall establish a date for the purposes of subsections (11) and (12) and shall publish it together with the standards. 2011, c. 11, s. 8 (2).

Same

(11) An entity that is designated as a safe workplace association or as a medical clinic or training centre specializing in occupational health and safety matters under section 6 of the *Workplace Safety and Insurance Act, 1997* on the date section 20 of the *Occupational Health and Safety Statute Law Amendment Act, 2011* comes into force is deemed to be designated for the purposes of this Act until the date established by the Minister under subsection (10). 2011, c. 11, s. 8 (2).

Same

(12) The standards that are in place under section 6 of the *Workplace Safety and Insurance Act, 1997* on the date section 20 of the *Occupational Health and Safety Statute Law Amendment Act, 2011* comes into force continue to apply, with necessary modifications, and are deemed to be standards for the purposes of this section, until the date established by the Minister under subsection (10). 2011, c. 11, s. 8 (2).

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 8 (2) - 1/04/2012

EFFECT OF DESIGNATION

Directions

22.6 (1) The Minister may direct a designated entity to take such actions as the Minister considers appropriate. 2011, c. 11, s. 8 (2).

Government directives

(2) In addition to the directions the Minister may issue under subsection (1), the Minister may direct an entity to comply with such government directives as the Minister specifies. 2011, c. 11, s. 8 (2).

Failure to comply

(3) If an entity has committed any failure described in paragraphs 1 to 3 of subsection 22.7 (3), the Minister may,

- (a) reduce or suspend grants to the entity while the non-compliance continues;
- (b) assume control of the entity and responsibility for its affairs and operations;
- (c) revoke the designation and cease to provide grants to the entity; or
- (d) take such other steps as he or she considers appropriate. 2011, c. 11, s. 8 (2).

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 8 (2) - 01/04/2012

Compliance and monitoring of designated entities

22.7 (1) The Chief Prevention Officer shall monitor the operation of designated entities and,

- (a) may require a designated entity to provide such information, records or accounts as the Chief Prevention Officer specifies; and
- (b) may make such inquiries and examinations as he or she considers necessary. 2011, c. 11, s. 8 (2).

Report to Minister

(2) The Chief Prevention Officer shall report to the Minister on the compliance of designated entities with the standards established under section 22.5 and with any directions given by the Minister under section 22.6. 2011, c. 11, s. 8 (2).

Advice to Minister

(3) Where the Chief Prevention Officer determines that any of the following have occurred, the Chief Prevention Officer shall report that determination to the Minister and may advise the Minister with respect to any action the Minister may decide to take under section 22.6:

1. A designated entity has failed to operate in accordance with a standard established under section 22.5 that applies to it.
2. A designated entity has failed to comply with a direction given by the Minister under section 22.6 or a requirement of the Chief Prevention Officer under clause (1) (a).
3. A designated entity has failed to co-operate in an inquiry or examination conducted by the Chief Prevention Officer under clause (1) (b). 2011, c. 11, s. 8 (2).

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 8 (2) - 1/04/2012

Appointment of administrator

22.8 (1) For the purposes of assuming control of an entity and responsibility for its affairs and operations under clause 22.6 (3) (b), the Minister may appoint an administrator. 2011, c. 11, s. 8 (2).

Term of appointment

(2) The appointment of the administrator remains valid until it is terminated by the Minister. 2011, c. 11, s. 8 (2).

Powers and duties of administrator

(3) The administrator has the exclusive right to exercise the powers and perform the duties of the board of directors and its officers and exercise the powers of its members. 2011, c. 11, s. 8 (2).

Same

(4) In the appointment, the Minister may specify the powers and duties of the administrator and the terms and conditions governing those powers and duties. 2011, c. 11, s. 8 (2).

Additional power of administrator

(5) The board of directors and officers may continue to act to the extent authorized by the Minister, but any such act is valid only if approved, in writing, by the administrator. 2011, c. 11, s. 8 (2).

Report, directions

(6) The administrator shall report to the Minister as required by him or her and shall carry out his or her directions. 2011, c. 11, s. 8 (2).

Meeting of members

(7) Before the termination of an administrator's appointment, the administrator may call a meeting of the members to elect a board of directors in accordance with the *Corporations Act*. 2011, c. 11, s. 8 (2).

Unincorporated entity

(8) This section applies, with necessary modifications, to an entity that is not incorporated. 2011, c. 11, s. 8 (2).

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 8 (2) - 1/04/2012; 2011, c. 11, s. 8 (3) - not in force

Delegation of powers and duties

22.9 Despite section 5, the Minister may delegate his or her powers or duties under sections 22.5, 22.6 and 22.8 only to the Chief Prevention Officer. 2011, c. 11, s. 8 (2).

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 8 (2) - 1/04/2012

PART III DUTIES OF EMPLOYERS AND OTHER PERSONS

Duties of constructor

23 (1) A constructor shall ensure, on a project undertaken by the constructor that,

- (a) the measures and procedures prescribed by this Act and the regulations are carried out on the project;
- (b) every employer and every worker performing work on the project complies with this Act and the regulations; and
- (c) the health and safety of workers on the project is protected.

Notice of project

(2) Where so prescribed, a constructor shall, before commencing any work on a project, give to a Director notice in writing of the project containing such information as may be prescribed. R.S.O. 1990, c. O.1, s. 23.

Duties of licensees

24 (1) A licensee shall ensure that,

- (a) the measures and procedures prescribed by this Act and the regulations are carried out with respect to logging in the licensed area;
- (b) every employer performing logging in the licensed area for the licensee complies with this Act and the regulations; and
- (c) the health and safety of workers employed by employers referred to in clause (b) is protected. R.S.O. 1990, c. O.1, s. 24 (1).

Definition

(2) In this section,

“licensed area” means the lands on which the licensee is authorized to harvest or use forest resources. R.S.O. 1990, c. O.1, s. 24 (2); 1994, c. 25, s. 83 (2).

Section Amendments with date in force (d/m/y)

1994, c. 25, s. 83 (2) - 1/04/1995

Duties of employers

25 (1) An employer shall ensure that,

- (a) the equipment, materials and protective devices as prescribed are provided;
- (b) the equipment, materials and protective devices provided by the employer are maintained in good condition;
- (c) the measures and procedures prescribed are carried out in the workplace;
- (d) the equipment, materials and protective devices provided by the employer are used as prescribed; and
- (e) a building, structure, or any part thereof, or any other part of a workplace, whether temporary or permanent, is capable of supporting any loads that may be applied to it,
 - (i) as determined by the applicable design requirements established under the version of the Building Code that was in force at the time of its construction,
 - (ii) in accordance with such other requirements as may be prescribed, or

- (iii) in accordance with good engineering practice, if subclauses (i) and (ii) do not apply. R.S.O. 1990, c. O.1, s. 25 (1); 2011, c. 11, s. 9.

Idem

(2) Without limiting the strict duty imposed by subsection (1), an employer shall,

- (a) provide information, instruction and supervision to a worker to protect the health or safety of the worker;
- (b) in a medical emergency for the purpose of diagnosis or treatment, provide, upon request, information in the possession of the employer, including confidential business information, to a legally qualified medical practitioner and to such other persons as may be prescribed;
- (c) when appointing a supervisor, appoint a competent person;
- (d) acquaint a worker or a person in authority over a worker with any hazard in the work and in the handling, storage, use, disposal and transport of any article, device, equipment or a biological, chemical or physical agent;
- (e) afford assistance and co-operation to a committee and a health and safety representative in the carrying out by the committee and the health and safety representative of any of their functions;
- (f) only employ in or about a workplace a person over such age as may be prescribed;
- (g) not knowingly permit a person who is under such age as may be prescribed to be in or about a workplace;
- (h) take every precaution reasonable in the circumstances for the protection of a worker;
- (i) post, in the workplace, a copy of this Act and any explanatory material prepared by the Ministry, both in English and the majority language of the workplace, outlining the rights, responsibilities and duties of workers;
- (j) prepare and review at least annually a written occupational health and safety policy and develop and maintain a program to implement that policy;
- (k) post at a conspicuous location in the workplace a copy of the occupational health and safety policy;

- (l) provide to the committee or to a health and safety representative the results of a report respecting occupational health and safety that is in the employer's possession and, if that report is in writing, a copy of the portions of the report that concern occupational health and safety; and
- (m) advise workers of the results of a report referred to in clause (l) and, if the report is in writing, make available to them on request copies of the portions of the report that concern occupational health and safety;
- (n) notify a Director if a committee or a health and safety representative, if any, has identified potential structural inadequacies of a building, structure, or any part thereof, or any other part of a workplace, whether temporary or permanent, as a source of danger or hazard to workers. R.S.O. 1990, c. O.1, s. 25 (2); 2017, c. 34, Sched. 30, s. 1 (1).

Idem

(3) For the purposes of clause (2) (c), an employer may appoint himself or herself as a supervisor where the employer is a competent person. R.S.O. 1990, c. O.1, s. 25 (3).

Same

(3.1) Any explanatory material referred to under clause (2) (i) may be published as part of the poster required under section 2 of the *Employment Standards Act, 2000*. 2009, c. 23, s. 2.

Idem

(4) Clause (2) (j) does not apply with respect to a workplace at which five or fewer workers are regularly employed. R.S.O. 1990, c. O.1, s. 25 (4); 2011, c. 1, Sched. 7, s. 2 (2).

Same

(5) Clause (2) (n) does not apply to an employer that owns the workplace. 2017, c. 34, Sched. 30, s. 1 (2).

Section Amendments with date in force (d/m/y)

2009, c. 23, s. 2 - 15/06/2010

2011, c. 1, Sched. 7, s. 2 (2) - 30/03/2011; 2011, c. 11, s. 9 - 1/06/2011

2017, c. 34, Sched. 30, s. 1 (1, 2) - 14/12/2017

Footwear

25.1 (1) An employer shall not require a worker to wear footwear with an elevated heel unless it is required for the worker to perform his or her work safely. 2017, c. 22, Sched. 3, s. 1.

Exception

(2) Subsection (1) does not apply with respect to an employer of a worker who works as a performer in the entertainment and advertising industry. 2017, c. 22, Sched. 3, s. 1.

Definitions

(3) In subsection (2),

“entertainment and advertising industry” means the industry of producing,

(a) live or broadcast performances, or

(b) visual, audio or audio-visual recordings of performances, in any medium or format; (“industrie du spectacle et de la publicité”)

“performance” means a performance of any kind, including theatre, dance, ice skating, comedy, musical productions, variety, circus, concerts, opera, modelling and voice-overs, and “performer” has a corresponding meaning. (“représentation”, “artiste”, “interprète”) 2017, c. 22, Sched. 3, s. 1.

Section Amendments with date in force (d/m/y)

2017, c. 22, Sched. 3, s. 1 - 27/11/2017

Naloxone kits

25.2 (1) Where an employer becomes aware, or ought reasonably to be aware, that there may be a risk of a worker having an opioid overdose at a workplace where that worker performs work for the employer, or where the prescribed circumstances exist, the employer shall,

(a) provide and maintain in good condition a naloxone kit in that workplace; and

(b) comply with any other prescribed requirements respecting the provision and maintenance of naloxone kits and the training referred to in subsection (3). 2022, c. 7, Sched. 4, s. 1

Location of kit

(2) The employer shall ensure that, at any time there are workers in the

workplace, the naloxone kit is in the charge of a worker who works in the vicinity of the kit and who has received the training described in subsection (3). 2022, c. 7, Sched. 4, s. 1.

Training

(3) The training shall include training to recognize an opioid overdose, to administer naloxone and to acquaint the worker with any hazards related to the administration of naloxone, and shall meet such other requirements as may be prescribed. 2022, c. 7, Sched. 4, s. 1.

Limit on disclosure

(4) No employer shall disclose to any person more personal information than is reasonably necessary to comply with this section. 2022, c. 7, Sched. 4, s. 1.

Employer duties

(5) For greater certainty, the employer duties set out in section 25 apply, as appropriate, with respect to the administration of naloxone in the workplace. 2022, c. 7, Sched. 4, s. 1.

Definition

(6) In this section,

“naloxone kit” means a kit that includes the prescribed contents. 2022, c. 7, Sched. 4, s. 1.

Additional duties of employers

26 (1) In addition to the duties imposed by section 25, an employer shall,

- (a) establish an occupational health service for workers as prescribed;
- (b) where an occupational health service is established as prescribed, maintain the same according to the standards prescribed;
- (c) keep and maintain accurate records of the handling, storage, use and disposal of biological, chemical or physical agents as prescribed;
- (d) accurately keep and maintain and make available to the worker affected such records of the exposure of a worker to biological, chemical or physical agents as may be prescribed;
- (e) notify a Director of the use or introduction into a workplace of such biological, chemical or physical agents as may be prescribed;
- (f) monitor at such time or times or at such interval or intervals the levels of biological, chemical or physical agents in a workplace and

keep and post accurate records thereof as prescribed;

- (g) comply with a standard limiting the exposure of a worker to biological, chemical or physical agents as prescribed;
- (h) establish a medical surveillance program for the benefit of workers as prescribed;
- (i) provide for safety-related medical examinations and tests for workers as prescribed;
- (j) where so prescribed, only permit a worker to work or be in a workplace who has undergone such medical examinations, tests or x-rays as prescribed and who is found to be physically fit to do the work in the workplace;
- (k) where so prescribed, provide a worker with written instructions as to the measures and procedures to be taken for the protection of a worker; and
- (l) carry out such training programs for workers, supervisors and committee members as may be prescribed.

Idem

(2) For the purposes of clause (1) (a), a group of employers, with the approval of a Director, may act as an employer. R.S.O. 1990, c. O.1, s. 26 (1, 2).

Idem

(3) If a worker participates in a prescribed medical surveillance program or undergoes prescribed medical examinations or tests, his or her employer shall pay,

- (a) the worker's costs for medical examinations or tests required by the medical surveillance program or required by regulation;
- (b) the worker's reasonable travel costs respecting the examinations or tests; and
- (c) the time the worker spends to undergo the examinations or tests, including travel time, which shall be deemed to be work time for which the worker shall be paid at his or her regular or premium rate as may be proper. R.S.O. 1990, c. O.1, s. 26 (3); 1994, c. 27, s. 120 (3).

Section Amendments with date in force (d/m/y)

1994, c. 27, s. 120 (3) - 9/12/1994

Duties of supervisor

- 27** (1) A supervisor shall ensure that a worker,
- (a) works in the manner and with the protective devices, measures and procedures required by this Act and the regulations; and
 - (b) uses or wears the equipment, protective devices or clothing that the worker's employer requires to be used or worn.

Additional duties of supervisor

- (2) Without limiting the duty imposed by subsection (1), a supervisor shall,
- (a) advise a worker of the existence of any potential or actual danger to the health or safety of the worker of which the supervisor is aware;
 - (b) where so prescribed, provide a worker with written instructions as to the measures and procedures to be taken for protection of the worker; and
 - (c) take every precaution reasonable in the circumstances for the protection of a worker. R.S.O. 1990, c. O.1, s. 27.

Duties of workers

- 28** (1) A worker shall,
- (a) work in compliance with the provisions of this Act and the regulations;
 - (b) use or wear the equipment, protective devices or clothing that the worker's employer requires to be used or worn;
 - (c) report to his or her employer or supervisor the absence of or defect in any equipment or protective device of which the worker is aware and which may endanger himself, herself or another worker; and
 - (d) report to his or her employer or supervisor any contravention of this Act or the regulations or the existence of any hazard of which he or she knows.

Idem

- (2) No worker shall,
- (a) remove or make ineffective any protective device required by the regulations or by his or her employer, without providing an adequate temporary protective device and when the need for

removing or making ineffective the protective device has ceased, the protective device shall be replaced immediately;

- (b) use or operate any equipment, machine, device or thing or work in a manner that may endanger himself, herself or any other worker; or
- (c) engage in any prank, contest, feat of strength, unnecessary running or rough and boisterous conduct.

Consent to medical surveillance

(3) A worker is not required to participate in a prescribed medical surveillance program unless the worker consents to do so. R.S.O. 1990, c. O.1, s. 28.

Duties of owners

29 (1) The owner of a workplace that is not a project shall,

- (a) ensure that,
 - (i) such facilities as are prescribed are provided,
 - (ii) any facilities prescribed to be provided are maintained as prescribed,
 - (iii) the workplace complies with the regulations, and
 - (iv) no workplace is constructed, developed, reconstructed, altered or added to except in compliance with this Act and the regulations; and
- (b) where so prescribed, furnish to a Director any drawings, plans or specifications of any workplace as prescribed.

Mine plans

(2) The owner of a mine shall cause drawings, plans or specifications to be maintained and kept up to date not more than six months last past on such scale and showing such matters or things as may be prescribed.

Plans of workplaces

(3) Where so prescribed, an owner or employer shall,

- (a) not begin any construction, development, reconstruction, alteration, addition or installation to or in a workplace until the drawings, layout and specifications thereof and any alterations thereto have been filed with the Ministry for review by an engineer of the Ministry for compliance with this Act and the regulations;

and

- (b) keep a copy of the drawings as reviewed in a convenient location at or near the workplace and such drawings shall be produced by the owner or employer upon the request of an inspector for his or her examination and inspection.

Additional information

(4) An engineer of the Ministry may require the drawings, layout and specifications to be supplemented by the owner or employer with additional information.

Fees

(5) Fees as prescribed for the filing and review of drawings, layout or specifications shall become due and payable by the owner or employer upon filing. R.S.O. 1990, c. O.1, s. 29.

Duties of owners — washroom access

29.1 (1) Subject to subsection (2), the owner of a workplace shall ensure that access to a washroom is provided, on request, to a worker who is present at the workplace to deliver anything to the workplace, or to collect anything from the workplace for delivery elsewhere. 2021, c. 35, Sched. 5, s. 1.

Exceptions

(2) Access to a washroom at a workplace is not required under subsection (1),

- (a) if providing access would not be reasonable or practical for reasons relating to the health or safety of any person at the workplace, including the worker who requests to use a washroom;
- (b) if providing access would not be reasonable or practical having regard to all the circumstances, including, but not limited to, the nature of the workplace, the type of work at the workplace, the conditions of work at the workplace, the security of any person at the workplace and the location of the washroom within the workplace; or
- (c) if the washroom is in, or can only be accessed through, a dwelling. 2021, c. 35, Sched. 5, s. 1.

Duty of project owners

30 (1) Before beginning a project, the owner shall determine whether any

designated substances are present at the project site and shall prepare a list of all designated substances that are present at the site.

Tenders

(2) If any work on a project is tendered, the person issuing the tenders shall include, as part of the tendering information, a copy of the list referred to in subsection (1).

Idem

(3) An owner shall ensure that a prospective constructor of a project on the owner's property has received a copy of the list referred to in subsection (1) before entering into a binding contract with the constructor.

Duty of constructors

(4) The constructor for a project shall ensure that each prospective contractor and subcontractor for the project has received a copy of the list referred to in subsection (1) before the prospective contractor or subcontractor enters into a binding contract for the supply of work on the project.

Liability

(5) An owner who fails to comply with this section is liable to the constructor and every contractor and subcontractor who suffers any loss or damages as the result of the subsequent discovery on the project of a designated substance that the owner ought reasonably to have known of but that was not on the list prepared under subsection (1).

Idem

(6) A constructor who fails to comply with this section is liable to every contractor and subcontractor who suffers any loss or damages as the result of the subsequent discovery on the project of a designated substance that was on the list prepared under subsection (1). R.S.O. 1990, c. O.1, s. 30.

Duties of suppliers

31 (1) Every person who supplies any machine, device, tool or equipment under any rental, leasing or similar arrangement for use in or about a workplace shall ensure,

- (a) that the machine, device, tool or equipment is in good condition;
- (b) that the machine, device, tool or equipment complies with this Act and the regulations; and
- (c) if it is the person's responsibility under the rental, leasing or similar

arrangement to do so, that the machine, device, tool or equipment is maintained in good condition.

Architects and engineers

(2) An architect as defined in the *Architects Act*, and a professional engineer as defined in the *Professional Engineers Act*, contravenes this Act if, as a result of his or her advice that is given or his or her certification required under this Act that is made negligently or incompetently, a worker is endangered. R.S.O. 1990, c. O.1, s. 31.

Duties of directors and officers of a corporation

32 Every director and every officer of a corporation shall take all reasonable care to ensure that the corporation complies with,

- (a) this Act and the regulations;
- (b) orders and requirements of inspectors and Directors; and
- (c) orders of the Minister. R.S.O. 1990, c. O.1, s. 32.

PART III.0.1 VIOLENCE AND HARASSMENT

Policies, violence and harassment

32.0.1 (1) An employer shall,

- (a) prepare a policy with respect to workplace violence;
- (b) prepare a policy with respect to workplace harassment; and
- (c) review the policies as often as is necessary, but at least annually. 2009, c. 23, s. 3.

Written form, posting

(2) The policies shall be in written form and shall be posted at a conspicuous place in the workplace. 2009, c. 23, s. 3.

Exception

(3) Subsection (2) does not apply if the number of workers regularly employed at the workplace is five or fewer, unless an inspector orders otherwise. 2009, c. 23, s. 3; 2011, c. 1, Sched. 7, s. 2 (3).

Section Amendments with date in force (d/m/y)

2009, c. 23, s. 3 - 15/06/2010

2011, c. 1, Sched. 7, s. 2 (3) - 30/03/2011

Program, violence

32.0.2 (1) An employer shall develop and maintain a program to implement the policy with respect to workplace violence required under clause 32.0.1 (1) (a). 2009, c. 23, s. 3.

Contents

- (2) Without limiting the generality of subsection (1), the program shall,
- (a) include measures and procedures to control the risks identified in the assessment required under subsection 32.0.3 (1) as likely to expose a worker to physical injury;
 - (b) include measures and procedures for summoning immediate assistance when workplace violence occurs or is likely to occur;
 - (c) include measures and procedures for workers to report incidents of workplace violence to the employer or supervisor;
 - (d) set out how the employer will investigate and deal with incidents or complaints of workplace violence; and
 - (e) include any prescribed elements. 2009, c. 23, s. 3.

Section Amendments with date in force (d/m/y)

2009, c. 23, s. 3 - 15/06/2010

Assessment of risks of violence

32.0.3 (1) An employer shall assess the risks of workplace violence that may arise from the nature of the workplace, the type of work or the conditions of work. 2009, c. 23, s. 3.

Considerations

- (2) The assessment shall take into account,
- (a) circumstances that would be common to similar workplaces;
 - (b) circumstances specific to the workplace; and
 - (c) any other prescribed elements. 2009, c. 23, s. 3.

Results

- (3) An employer shall,
- (a) advise the committee or a health and safety representative, if any, of the results of the assessment, and provide a copy if the assessment is in writing; and

- (b) if there is no committee or health and safety representative, advise the workers of the results of the assessment and, if the assessment is in writing, provide copies on request or advise the workers how to obtain copies. 2009, c. 23, s. 3.

Reassessment

(4) An employer shall reassess the risks of workplace violence as often as is necessary to ensure that the related policy under clause 32.0.1 (1) (a) and the related program under subsection 32.0.2 (1) continue to protect workers from workplace violence. 2009, c. 23, s. 3.

Same

(5) Subsection (3) also applies with respect to the results of the reassessment. 2009, c. 23, s. 3.

Section Amendments with date in force (d/m/y)

2009, c. 23, s. 3 - 15/06/2010

Domestic violence

32.0.4 If an employer becomes aware, or ought reasonably to be aware, that domestic violence that would likely expose a worker to physical injury may occur in the workplace, the employer shall take every precaution reasonable in the circumstances for the protection of the worker. 2009, c. 23, s. 3.

Section Amendments with date in force (d/m/y)

2009, c. 23, s. 3 - 15/06/2010

Duties re violence

32.0.5 (1) For greater certainty, the employer duties set out in section 25, the supervisor duties set out in section 27, and the worker duties set out in section 28 apply, as appropriate, with respect to workplace violence. 2009, c. 23, s. 3.

Information

- (2) An employer shall provide a worker with,
- (a) information and instruction that is appropriate for the worker on the contents of the policy and program with respect to workplace violence; and

- (b) any other prescribed information or instruction. 2009, c. 23, s. 3.

Provision of information

(3) An employer's duty to provide information to a worker under clause 25 (2) (a) and a supervisor's duty to advise a worker under clause 27 (2) (a) include the duty to provide information, including personal information, related to a risk of workplace violence from a person with a history of violent behaviour if,

- (a) the worker can be expected to encounter that person in the course of his or her work; and
- (b) the risk of workplace violence is likely to expose the worker to physical injury. 2009, c. 23, s. 3.

Limit on disclosure

(4) No employer or supervisor shall disclose more personal information in the circumstances described in subsection (3) than is reasonably necessary to protect the worker from physical injury. 2009, c. 23, s. 3.

Section Amendments with date in force (d/m/y)

2009, c. 23, s. 3 - 15/06/2010

Program, harassment

32.0.6 (1) An employer shall, in consultation with the committee or a health and safety representative, if any, develop and maintain a written program to implement the policy with respect to workplace harassment required under clause 32.0.1 (1) (b). 2016, c. 2, Sched. 4, s. 2 (1).

Contents

- (2) Without limiting the generality of subsection (1), the program shall,
- (a) include measures and procedures for workers to report incidents of workplace harassment to the employer or supervisor;
 - (b) include measures and procedures for workers to report incidents of workplace harassment to a person other than the employer or supervisor, if the employer or supervisor is the alleged harasser;
 - (c) set out how incidents or complaints of workplace harassment will be investigated and dealt with;

- (d) set out how information obtained about an incident or complaint of workplace harassment, including identifying information about any individuals involved, will not be disclosed unless the disclosure is necessary for the purposes of investigating or taking corrective action with respect to the incident or complaint, or is otherwise required by law;
- (e) set out how a worker who has allegedly experienced workplace harassment and the alleged harasser, if he or she is a worker of the employer, will be informed of the results of the investigation and of any corrective action that has been taken or that will be taken as a result of the investigation; and
- (f) include any prescribed elements. 2009, c. 23, s. 3; 2016, c. 2, Sched. 4, s. 2 (2).

Section Amendments with date in force (d/m/y)

2009, c. 23, s. 3 - 15/06/2010

2016, c. 2, Sched. 4, s. 2 (1, 2) - 08/09/2016

Duties re harassment

32.0.7 (1) To protect a worker from workplace harassment, an employer shall ensure that,

- (a) an investigation is conducted into incidents and complaints of workplace harassment that is appropriate in the circumstances;
- (b) the worker who has allegedly experienced workplace harassment and the alleged harasser, if he or she is a worker of the employer, are informed in writing of the results of the investigation and of any corrective action that has been taken or that will be taken as a result of the investigation;
- (c) the program developed under section 32.0.6 is reviewed as often as necessary, but at least annually, to ensure that it adequately implements the policy with respect to workplace harassment required under clause 32.0.1 (1) (b); and
- (d) such other duties as may be prescribed are carried out. 2016, c. 2, Sched. 4, s. 3.

Results of investigation not a report

(2) The results of an investigation under clause (1) (a), and any report created in the course of or for the purposes of the investigation, are not a report respecting occupational health and safety for the purposes of subsection 25 (2). 2016, c. 2, Sched. 4, s. 3.

Section Amendments with date in force (d/m/y)

2009, c. 23, s. 3 - 15/06/2010

2016, c. 2, Sched. 4, s. 3 - 08/09/2016

Information and instruction, harassment

32.0.8 An employer shall provide a worker with,

- (a) information and instruction that is appropriate for the worker on the contents of the policy and program with respect to workplace harassment; and
- (b) any other prescribed information. 2016, c. 2, Sched. 4, s. 3.

Section Amendments with date in force (d/m/y)

2016, c. 2, Sched. 4, s. 3 - 08/09/2016

**PART III.1
CODES OF PRACTICE**

Definition

32.1 In this Part,

“legal requirement” means a requirement imposed by a provision of this Act or by a regulation made under this Act. 2011, c. 11, s. 10.

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (4) - 29/06/2001

2011, c. 11, s. 10 - 1/06/2011

Approval of code of practice

32.2 (1) The Minister may approve a code of practice and the approved code of practice may be followed to comply with a legal requirement specified in the approval. 2011, c. 11, s. 11.

Same

(1.1) An approval made under subsection (1) may be subject to such terms and conditions as the Minister considers appropriate and may be general or particular in its application. 2011, c. 11, s. 11.

Withdrawal of approval

(2) The Minister may withdraw an approval under subsection (1). 2001, c. 9, Sched. I, s. 3 (4).

Legislation Act, 2006, Part III

(3) Part III (Regulations) of the *Legislation Act, 2006* does not apply with respect to an approval under this section or the withdrawal of such an approval. 2001, c. 9, Sched. I, s. 3 (4); 2006, c. 21, Sched. F, s. 136 (1).

Delegation

(4) The Minister may delegate the Minister's power under this section to the Deputy Minister. 2001, c. 9, Sched. I, s. 3 (4).

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (4) - 29/06/2001

2006, c. 21, Sched. F, s. 136 (1) - 25/07/2007

2011, c. 11, s. 11 - 1/06/2011

Publication of approval, etc.

32.3 (1) An approval or a withdrawal of an approval under section 32.2 shall be published in *The Ontario Gazette*. 2001, c. 9, Sched. I, s. 3 (4).

Effect of publication

(2) Publication of an approval or withdrawal of approval in *The Ontario Gazette*,

- (a) is, in the absence of evidence to the contrary, proof of the approval or withdrawal of approval; and
- (b) shall be deemed to be notice of the approval or withdrawal of approval to everyone affected by it. 2001, c. 9, Sched. I, s. 3 (4).

Judicial notice

(3) Judicial notice shall be taken of an approval or withdrawal of approval

published in *The Ontario Gazette*. 2001, c. 9, Sched. I, s. 3 (4).

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (4) - 29/06/2001

Effect of approved code of practice

32.4 The following apply if a code of practice is approved under section 32.2:

1. Subject to any terms or conditions set out in the approval, compliance with the approved code of practice is deemed to be compliance with the legal requirement.
2. A failure to comply with the approved code of practice is not, in itself, a breach of the legal requirement. 2011, c. 11, s. 12.

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (4) - 29/06/2001

2011, c. 11, s. 12 - 1/06/2011

PART IV TOXIC SUBSTANCES

Orders of Director

33 (1) Where a biological, chemical or physical agent or combination of such agents is used or intended to be used in the workplace and its presence in the workplace or the manner of its use is in the opinion of a Director likely to endanger the health of a worker, the Director shall by notice in writing to the employer order that the use, intended use, presence or manner of use be,

- (a) prohibited;
- (b) limited or restricted in such manner as the Director specifies; or
- (c) subject to such conditions regarding administrative control, work practices, engineering control and time limits for compliance as the Director specifies. R.S.O. 1990, c. O.1, s. 33 (1).

Contents of order

(2) Where a Director makes an order to an employer under subsection (1), the order shall,

- (a) identify the biological, chemical or physical agent, or combination of such agents, and the manner of use that is the subject-matter of the order; and
- (b) state the opinion of the Director as to the likelihood of the danger to the health of a worker, and the Director's reasons in respect thereof, including the matters or causes which give rise to his or her opinion. R.S.O. 1990, c. O.1, s. 33 (2).

Posting of order

(3) The employer shall provide a copy of an order made under subsection (1) to the committee, health and safety representative and trade union, if any, and shall cause a copy of the order to be posted in a conspicuous place in the workplace where it is most likely to come to the attention of the workers who may be affected by the use, presence or intended use of the biological, chemical or physical agent or combination of agents. R.S.O. 1990, c. O.1, s. 33 (3).

Appeal to Minister

(4) Where the employer, a worker or a trade union considers that he, she or it is aggrieved by an order made under subsection (1), the employer, worker or trade union may by notice in writing given within fourteen days of the making of the order appeal to the Minister. R.S.O. 1990, c. O.1, s. 33 (4).

Delegation

(5) The Minister may, having regard to the circumstances, direct that an appeal under subsection (4) be determined on his or her behalf by a person appointed by the Minister for that purpose. R.S.O. 1990, c. O.1, s. 33 (5).

Procedure

(6) The Minister or, where a person has been appointed under subsection (5), the person so appointed, may give such directions and issue such orders as he or she considers proper or necessary concerning the procedures to be adopted or followed and shall have all the powers of a chair of a board of arbitration under subsection 48 (12) of the *Labour Relations Act, 1995*. R.S.O. 1990, c. O.1, s. 33 (6); 2001, c. 9, Sched. I, s. 3 (5).

Substitution of findings

(7) On an appeal, the Minister or, where a person has been appointed under subsection (5), the person so appointed, may substitute his or her findings for those of the Director and may rescind or affirm the order appealed from or make a new order in substitution therefor and such order shall stand in the place of and have the like effect under this Act and the regulations as the order of the Director, and such order shall be final and not subject to appeal under this section. R.S.O. 1990, c. O.1, s. 33 (7).

Matters to be considered

(8) In making a decision or order under subsection (1) or (7), a Director, the Minister or, where a person has been appointed under subsection (5), the person so appointed shall consider as relevant factors,

- (a) the relation of the agent, combination of agents or by-product to a biological or chemical agent that is known to be a danger to health;
- (b) the quantities of the agent, combination of agents or by-product used or intended to be used or present;
- (c) the extent of exposure;
- (d) the availability of other processes, agents or equipment for use or intended use;
- (e) data regarding the effect of the process or agent on health; and
- (f) any criteria or guide with respect to the exposure of a worker to a biological, chemical or physical agent or combination of such agents that are adopted by a regulation. R.S.O. 1990, c. O.1, s. 33 (8).

Suspension of order by Minister, etc., pending disposition of appeal

(9) On an appeal under subsection (4), the Minister or, where a person has been appointed under subsection (5), the person so appointed may suspend the operation of the order appealed from pending the disposition of the appeal. R.S.O. 1990, c. O.1, s. 33 (9).

Remuneration of appointee

(10) A person appointed under subsection (5) shall be paid such remuneration and expenses as the Minister, with the approval of the Lieutenant Governor in Council, determines. R.S.O. 1990, c. O.1, s. 33 (10).

Application

(11) This section does not apply to designated substances. R.S.O. 1990, c. O.1, s. 33 (11).

No hearing required prior to issuing order

(12) A Director is not required to hold or afford to an employer or any other person an opportunity for a hearing before making an order under subsection (1). R.S.O. 1990, c. O.1, s. 33 (12).

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (5) - 29/06/2001

34 Repealed: 2019, c. 14, Sched. 13, s. 2.

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (6) - See: Table of Public Statute Provisions Repealed Under Section 10.1 of the Legislation Act, 2006 - 31/12/2011

2019, c. 14, Sched. 13, s. 2 - 10/12/2019

Designation of substances

35 Prior to a substance being designated under paragraph 23 of subsection 70 (2), the Minister,

- (a) shall publish in *The Ontario Gazette* a notice stating that the substance may be designated and calling for briefs or submissions in relation to the designation; and
- (b) shall publish in *The Ontario Gazette* a notice setting forth the proposed regulation relating to the designation of the substance at least sixty days before the regulation is filed with the Registrar of Regulations. R.S.O. 1990, c. O.1, s. 35.

36 Repealed: 2001, c. 9, Sched. I, s. 3 (7).

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (7) - 29/06/2001

Hazardous material identification and data sheets

37 (1) An employer,

- (a) shall ensure that all hazardous materials present in the workplace

are identified in the prescribed manner;

- (b) shall obtain or prepare, as may be prescribed, a current safety data sheet for all hazardous materials present in the workplace; and
- (c) shall ensure that the identification required by clause (a) and safety data sheets required by clause (b) are available in English and such other languages as may be prescribed. R.S.O. 1990, c. O.1, s. 37 (1); 2015, c. 27, Sched. 4, s. 2 (1, 2).

Prohibition

(2) No person shall remove or deface the identification described in clause (1) (a) for a hazardous material. R.S.O. 1990, c. O.1, s. 37 (2).

Hazardous material not to be used

(3) An employer shall ensure that a hazardous material is not used, handled or stored at a workplace unless the prescribed requirements concerning identification, safety data sheets and worker instruction and training are met. R.S.O. 1990, c. O.1, s. 37 (3); 2015, c. 27, Sched. 4, s. 2 (2).

Notice to Director

(4) An employer shall advise a Director in writing if the employer, after making reasonable efforts, is unable to obtain a label or safety data sheet required by subsection (1). R.S.O. 1990, c. O.1, s. 37 (4); 2015, c. 27, Sched. 4, s. 2 (3).

(5) REPEALED: 2015, c. 27, Sched. 4, s. 2 (4).

Section Amendments with date in force (d/m/y)

2011, c. 1, Sched. 7, s. 2 (4, 5, 12-14) - no effect - see 2015, c. 27, Sched. 4, s. 11 - 03/12/2015

2015, c. 27, Sched. 4, s. 2 - 01/07/2016

Making safety data sheets available

38 (1) A copy of every current safety data sheet required by this Part in respect of hazardous materials in a workplace shall be,

- (a) made available by the employer in the workplace in such a manner as to allow examination by the workers;
- (b) furnished by the employer to the committee or health and safety representative, if any, for the workplace or to a worker selected by the workers to represent them, if there is no committee or health

and safety representative;

- (c) furnished by the employer on request or if so prescribed to the medical officer of health of the health unit in which the workplace is located;
- (d) furnished by the employer on request or if so prescribed to the fire department which serves the location in which the workplace is located; and
- (e) filed by the employer with a Director on request or if so prescribed. 2001, c. 9, Sched. I, s. 3 (8); 2015, c. 27, Sched. 4, s. 3 (1).

Additional requirement

(1.1) In addition to complying with subsection (1), the employer shall make a copy of a safety data sheet readily available to those workers who may be exposed to the hazardous material to which it relates. 2015, c. 27, Sched. 4, s. 3 (2).

Public access

(2) The medical officer of health, at the request of any person, shall request an employer to furnish a copy of a current safety data sheet. 2001, c. 9, Sched. I, s. 3 (9); 2015, c. 27, Sched. 4, s. 3 (3).

Same

(3) At the request of any person, the medical officer of health shall make available to the person for inspection a copy of any safety data sheet requested by the person and in the possession of the medical officer of health. 2001, c. 9, Sched. I, s. 3 (9); 2015, c. 27, Sched. 4, s. 3 (4).

Idem

(4) A medical officer of health shall not disclose the name of any person who makes a request under subsection (2) or (3). R.S.O. 1990, c. O.1, s. 38 (4).

Electronic format

(5) For greater certainty, a copy of a safety data sheet in an electronic format is a copy for the purposes of this section. 2015, c. 27, Sched. 4, s. 3 (5).

Requirement to consult

(6) An employer shall consult with the committee and the health and safety representative, if any, on making safety data sheets available in the workplace or furnishing them as required by clauses (1) (a) and (b) and

subsection (1.1). 2015, c. 27, Sched. 4, s. 3 (5).

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (8, 9) - 29/06/2001

2011, c. 1, Sched. 7, s. 2 (6, 12-14) - no effect - see 2015, c. 27, Sched. 4, s. 11- 03/12/2015

2015, c. 27, Sched. 4, s. 3 - 01/07/2016

Assessment for hazardous materials

39 (1) Where so prescribed, an employer shall assess all biological and chemical agents produced in the workplace for use therein to determine if they are hazardous materials.

Assessments to be made available

(2) The assessment required by subsection (1) shall be in writing and a copy of it shall be,

- (a) made available by the employer in the workplace in such a manner as to allow examination by the workers;
- (b) furnished by the employer to the committee or health and safety representative, if any, for the workplace or to a worker selected by the workers to represent them, if there is no committee or health and safety representative. R.S.O. 1990, c. O.1, s. 39.

Confidential business information

40 (1) An employer may file a claim for an exemption from disclosing,

- (a) information required under this Part in a label or safety data sheet; or
- (b) the name of a toxicological study used by the employer to prepare a safety data sheet,

on the grounds that it is confidential business information. R.S.O. 1990, c. O.1, s. 40 (1); 2001, c. 9, Sched. I, s. 3 (10); 2015, c. 27, Sched. 4, s. 4 (1, 2).

Idem

(2) An application under subsection (1) shall be made only in respect of such types of confidential business information as may be prescribed. R.S.O. 1990, c. O.1, s. 40 (2).

Determination of claim

(3) A claim for an exemption made under subsection (1) shall be determined in accordance with the process set out in the *Hazardous Materials Information Review Act* (Canada). 2015, c. 27, Sched. 4, s. 4 (3).

Appeal

(4) The employer or any worker of the employer or any trade union representing the workers of the employer may, in accordance with the appeal process set out in the *Hazardous Materials Information Review Act* (Canada), appeal a determination made under subsection (3) and the appeal shall be determined in accordance with that process. 2015, c. 27, Sched. 4, s. 4 (3).

(5) REPEALED: 2015, c. 27, Sched. 4, s. 4 (3).

Effect of claim

(6) Information that an employer considers to be confidential business information is exempt from disclosure from the time a claim is filed under subsection (1) until the claim is finally determined and for three years thereafter, if the claim is found to be valid. R.S.O. 1990, c. O.1, s. 40 (6).

Effect of determination

(7) A determination made under this section applies for the purposes of this Part. 2015, c. 27, Sched. 4, s. 4 (4).

(8) REPEALED: 2015, c. 27, Sched. 4, s. 4 (4).

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (10) - 29/06/2001

2011, c. 1, Sched. 7, s. 2 (12, 14) - no effect - see 2015, c. 27, Sched. 4, s. 11 - 03/12/2015

2015, c. 27, Sched. 4, s. 4 - 01/07/2016

Information privileged

40.1 (1) Subject to subsection (2), all information obtained by an employee in the Ministry from a person acting under the authority of the *Hazardous Materials Information Review Act* (Canada) is privileged and no employee in the Ministry shall knowingly, without consent in writing of the Chief Screening Officer appointed under that Act,

- (a) communicate or allow to be communicated to any person any information obtained; or

- (b) allow any person to inspect or to have access to any part of a book, record, writing or other document containing any information obtained. 2015, c. 27, Sched. 4, s. 5 (1).

Exception

(2) An employee in the Ministry may communicate or allow to be communicated information described in subsection (1) or allow inspection of or access to any part of a book, record, writing or other document containing any such information to or by,

- (a) another employee in the Ministry for the purpose of administering or enforcing this Act; or
- (b) a physician or a medical professional prescribed under the *Hazardous Materials Information Review Act* (Canada) who requests that information for the purpose of making a medical diagnosis of, or rendering medical treatment to, a person in an emergency. 1992, c. 14, s. 2 (1); 2006, c. 35, Sched. C, s. 93 (4).

Conditions

(3) No person who obtains any information under subsection (2) shall knowingly disclose that information to any other person or knowingly allow any other person to have access to that information except as may be necessary for the purposes mentioned in that subsection. 1992, c. 14, s. 2 (1).

Non-disclosure prevails

(4) Despite subsection 63 (1), the requirements in this section that information received from a person acting under the authority of the *Hazardous Materials Information Review Act* (Canada) not be disclosed prevail over any other law. 2015, c. 27, Sched. 4, s. 5 (2).

Section Amendments with date in force (d/m/y)

1992, c. 14, s. 2 (1) - 25/06/1992

2006, c. 35, Sched. C, s. 93 (3, 4) - 20/08/2007

2015, c. 27, Sched. 4, s. 5 - 01/07/2016

Hazardous physical agents

41 (1) A person who distributes or supplies, directly or indirectly, or manufactures, produces or designs a thing for use in a workplace that causes, emits or produces a hazardous physical agent when the thing is in

use or operation shall ensure that such information as may be prescribed is readily available respecting the hazardous physical agent and the proper use or operation of the thing.

Duty of employer

(2) Where an employer has a thing described in subsection (1) in the workplace, the employer shall ensure that the information referred to in that subsection has been obtained and is,

- (a) made available in the workplace for workers who use or operate the thing or who are likely to be exposed to the hazardous physical agent; and
- (b) furnished by the employer to the committee or health and safety representative, if any, for the workplace or a worker selected by the workers to represent them, if there is no committee or health and safety representative.

Notices

(3) An employer to whom subsection (2) applies shall post prominent notices identifying and warning of the hazardous physical agent in the part of the workplace in which the thing is used or operated or is to be used or operated.

Idem

(4) Notices required by subsection (3) shall contain such information as may be prescribed and shall be in English and such other language or languages as may be prescribed. R.S.O. 1990, c. O.1, s. 41.

Instruction and training

42 (1) In addition to providing information and instruction to a worker as required by clause 25 (2) (a), an employer shall ensure that a worker exposed or likely to be exposed to a hazardous material or to a hazardous physical agent receives, and that the worker participates in, such instruction and training as may be prescribed.

Consultation

(2) The instruction and training to be given under subsection (1) shall be developed and implemented by the employer in consultation with the committee or health and safety representative, if any, for the workplace.

Review

(3) An employer shall review, in consultation with the committee or health

and safety representative, if any, for the workplace, the training and instruction provided to a worker and the worker's familiarity therewith at least annually.

Idem

(4) The review described in subsection (3) shall be held more frequently than annually, if,

- (a) the employer, on the advice of the committee or health and safety representative, if any, for the workplace, determines that such reviews are necessary; or
- (b) there is a change in circumstances that may affect the health or safety of a worker. R.S.O. 1990, c. O.1, s. 42.

PART V

RIGHT TO REFUSE OR TO STOP WORK WHERE HEALTH OR SAFETY IN DANGER

Refusal to work

Non-application to certain workers

43 (1) This section does not apply to a worker described in subsection (2),

- (a) when a circumstance described in clause (3) (a), (b), (b.1) or (c) is inherent in the worker's work or is a normal condition of the worker's employment; or
- (b) when the worker's refusal to work would directly endanger the life, health or safety of another person. R.S.O. 1990, c. O.1, s. 43 (1); 2009, c. 23, s. 4 (1).

Idem

(2) The worker referred to in subsection (1) is,

- (a) a person employed in, or a member of, a police force to which the *Police Services Act* applies;

Note: On a day to be named by proclamation of the Lieutenant Governor, clause 43 (2) (a) of the Act is amended by striking out "a police force to which the *Police Services Act* applies" at the end and substituting "a police service to which the *Community Safety and Policing Act, 2019* applies". (See: 2019, c. 1, Sched. 4, s. 39 (1))

- (b) a firefighter as defined in subsection 1 (1) of the *Fire Protection and Prevention Act, 1997*;

- (c) a person employed in the operation of,
 - (i) a correctional institution or facility,
 - (ii) a place of secure custody designated under section 24.1 of the *Young Offenders Act* (Canada), whether in accordance with section 88 of the *Youth Criminal Justice Act* (Canada) or otherwise,
 - (iii) a place of temporary detention under the *Youth Criminal Justice Act* (Canada), or
 - (iv) a similar institution, facility or place;
- (d) a person employed in the operation of,
 - (i) a hospital, sanatorium, long-term care home, psychiatric institution, mental health centre or rehabilitation facility,
 - (ii) a residential group home or other facility for persons with behavioural or emotional problems or a physical, mental or developmental disability,
 - (iii) an ambulance service or a first aid clinic or station,
 - (iv) a laboratory operated by the Crown or licensed under the *Laboratory and Specimen Collection Centre Licensing Act*, or
 - (v) a laundry, food service, power plant or technical service or facility used in conjunction with an institution, facility or service described in subclause (i) to (iv). R.S.O. 1990, c. O.1, s. 43 (2); 1997, c. 4, s. 84; 2001, c. 13, s. 22; 2006, c. 19, Sched. D, s. 14; 2007, c. 8, s. 221.

Refusal to work

- (3) A worker may refuse to work or do particular work where he or she has reason to believe that,
- (a) any equipment, machine, device or thing the worker is to use or operate is likely to endanger himself, herself or another worker;
 - (b) the physical condition of the workplace or the part thereof in which he or she works or is to work is likely to endanger himself or herself;
- (b.1) workplace violence is likely to endanger himself or herself; or
- (c) any equipment, machine, device or thing he or she is to use or operate or the physical condition of the workplace or the part thereof in which he or she works or is to work is in contravention

of this Act or the regulations and such contravention is likely to endanger himself, herself or another worker. R.S.O. 1990, c. O.1, s. 43 (3); 2009, c. 23, s. 4 (2).

Report of refusal to work

(4) Upon refusing to work or do particular work, the worker shall promptly report the circumstances of the refusal to the worker's employer or supervisor who shall forthwith investigate the report in the presence of the worker and, if there is such, in the presence of one of,

- (a) a committee member who represents workers, if any;
- (b) a health and safety representative, if any; or
- (c) a worker who because of knowledge, experience and training is selected by a trade union that represents the worker, or if there is no trade union, is selected by the workers to represent them,

who shall be made available and who shall attend without delay. R.S.O. 1990, c. O.1, s. 43 (4).

Worker to remain in safe place and available for investigation

(5) Until the investigation is completed, the worker shall remain,

- (a) in a safe place that is as near as reasonably possible to his or her work station; and
- (b) available to the employer or supervisor for the purposes of the investigation. 2009, c. 23, s. 4 (3).

Refusal to work following investigation

(6) Where, following the investigation or any steps taken to deal with the circumstances that caused the worker to refuse to work or do particular work, the worker has reasonable grounds to believe that,

- (a) the equipment, machine, device or thing that was the cause of the refusal to work or do particular work continues to be likely to endanger himself, herself or another worker;
- (b) the physical condition of the workplace or the part thereof in which he or she works continues to be likely to endanger himself or herself;
- (b.1) workplace violence continues to be likely to endanger himself or herself; or
- (c) any equipment, machine, device or thing he or she is to use or operate or the physical condition of the workplace or the part

thereof in which he or she works or is to work is in contravention of this Act or the regulations and such contravention continues to be likely to endanger himself, herself or another worker,

the worker may refuse to work or do the particular work and the employer or the worker or a person on behalf of the employer or worker shall cause an inspector to be notified thereof. R.S.O. 1990, c. O.1, s. 43 (6); 2009, c. 23, s. 4 (4).

Investigation by inspector

(7) An inspector shall investigate the refusal to work in consultation with the employer or a person representing the employer, the worker, and if there is such, the person mentioned in clause (4) (a), (b) or (c). 2001, c. 9, Sched. I, s. 3 (11).

Decision of inspector

(8) The inspector shall, following the investigation referred to in subsection (7), decide whether a circumstance described in clause (6) (a), (b), (b.1) or (c) is likely to endanger the worker or another person. 2009, c. 23, s. 4 (5).

Idem

(9) The inspector shall give his or her decision, in writing, as soon as is practicable, to the employer, the worker, and, if there is such, the person mentioned in clause (4) (a), (b) or (c). R.S.O. 1990, c. O.1, s. 43 (9).

Worker to remain in safe place and available for investigation

(10) Pending the investigation and decision of the inspector, the worker shall remain, during the worker's normal working hours, in a safe place that is as near as reasonably possible to his or her work station and available to the inspector for the purposes of the investigation. 2009, c. 23, s. 4 (6).

Exception

(10.1) Subsection (10) does not apply if the employer, subject to the provisions of a collective agreement, if any,

- (a) assigns the worker reasonable alternative work during the worker's normal working hours; or
- (b) subject to section 50, where an assignment of reasonable alternative work is not practicable, gives other directions to the worker. 2009, c. 23, s. 4 (6).

Duty to advise other workers

(11) Pending the investigation and decision of the inspector, no worker shall be assigned to use or operate the equipment, machine, device or thing or to work in the workplace or in the part of the workplace being investigated unless, in the presence of a person described in subsection (12), the worker has been advised of the other worker's refusal and of his or her reasons for the refusal. R.S.O. 1990, c. O.1, s. 43 (11).

Idem

(12) The person referred to in subsection (11) must be,

- (a) a committee member who represents workers and, if possible, who is a certified member;
- (b) a health and safety representative; or
- (c) a worker who because of his or her knowledge, experience and training is selected by the trade union that represents the worker or, if there is no trade union, by the workers to represent them. R.S.O. 1990, c. O.1, s. 43 (12).

Entitlement to be paid

(13) A person shall be deemed to be at work and the person's employer shall pay him or her at the regular or premium rate, as may be proper,

- (a) for the time spent by the person carrying out the duties under subsections (4) and (7) of a person mentioned in clause (4) (a), (b) or (c); and
- (b) for time spent by the person carrying out the duties under subsection (11) of a person described in subsection (12). R.S.O. 1990, c. O.1, s. 43 (13).

Section Amendments with date in force (d/m/y)

1997, c. 4, s. 84 - 29/10/1997

2001, c. 9, Sched. I, s. 3 (11) - 29/06/2001; 2001, c. 13, s. 22 - 30/11/2001

2006, c. 19, Sched. D, s. 14 - 22/06/2006

2007, c. 8, s. 221 - 1/07/2010

2009, c. 23, s. 4 - 15/06/2010

2018, c. 3, Sched. 5, s. 41 (1) - no effect - see 2019, c. 1, Sched. 3, s. 5 - 26/03/2019

2019, c. 1, Sched. 4, s. 39 (1) - not in force

Definition and non-application

Definition

44 (1) In sections 45 to 48,

“dangerous circumstances” means a situation in which,

- (a) a provision of this Act or the regulations is being contravened,
- (b) the contravention poses a danger or a hazard to a worker, and
- (c) the danger or hazard is such that any delay in controlling it may seriously endanger a worker.

Non-application

(2) Sections 45 to 49 do not apply to,

- (a) a workplace at which workers described in clause 43 (2) (a), (b) or (c) are employed; or
- (b) a workplace at which workers described in clause 43 (2) (d) are employed if a work stoppage would directly endanger the life, health or safety of another person. R.S.O. 1990, c. O.1, s. 44.

Bilateral work stoppage

45 (1) A certified member who has reason to believe that dangerous circumstances exist at a workplace may request that a supervisor investigate the matter and the supervisor shall promptly do so in the presence of the certified member.

Investigation by second certified member

(2) The certified member may request that a second certified member representing the other workplace party investigate the matter if the first certified member has reason to believe that dangerous circumstances continue after the supervisor’s investigation and remedial actions, if any.

Idem

(3) The second certified member shall promptly investigate the matter in the presence of the first certified member.

Direction following investigation

(4) If both certified members find that the dangerous circumstances exist, the certified members may direct the constructor or employer to stop the work or to stop the use of any part of a workplace or of any equipment, machine, device, article or thing.

Constructor's or employer's duties

(5) The constructor or employer shall immediately comply with the direction and shall ensure that compliance is effected in a way that does not endanger a person.

Investigation by inspector

(6) If the certified members do not agree whether dangerous circumstances exist, either certified member may request that an inspector investigate the matter and the inspector shall do so and provide the certified members with a written decision.

Cancellation of direction

(7) After taking steps to remedy the dangerous circumstances, the constructor or employer may request the certified members or an inspector to cancel the direction.

Idem

(8) The certified members who issued a direction may jointly cancel it or an inspector may cancel it.

Delegation by certified member

(9) In such circumstances as may be prescribed, a certified member who represents the constructor or employer shall designate a person to act under this section in his or her stead when the certified member is not available at the workplace. R.S.O. 1990, c. O.1, s. 45.

Declaration against constructor, etc.

46 (1) A certified member at a workplace or an inspector who has reason to believe that the procedure for stopping work set out in section 45 will not be sufficient to protect a constructor's or employer's workers at the workplace from serious risk to their health or safety may apply to the Board for a declaration or recommendation described in subsection (5), or both. R.S.O. 1990, c. O.1, s. 46 (1); 1998, c. 8, s. 53 (1).

(2) Repealed: 1998, c. 8, s. 53 (2).

Minister a party

(3) The Minister is entitled to be a party to a proceeding before the Board. R.S.O. 1990, c. O.1, s. 46 (3); 1998, c. 8, s. 53 (3).

Board procedure, etc.

(4) Subsections 61 (2) to (3.13) and subsection 61 (8) apply, with necessary

modifications, with respect to applications under this section. 1998, c. 8, s. 53 (4).

Declaration and recommendation

(5) If the Board finds that the procedure for stopping work set out in section 45 will not be sufficient to protect the constructor's or employer's workers at the workplace from serious risk to their health or safety, the Board,

- (a) may issue a declaration that the constructor or employer is subject to the procedure for stopping work set out in section 47 for the period specified; and
- (b) may recommend to the Minister that an inspector be assigned to oversee the health and safety practices of the constructor or employer at the workplace on a full-time or part-time basis for a specified period. R.S.O. 1990, c. O.1, s. 46 (5); 1998, c. 8, s. 53 (5).

Criteria

(6) In making a finding under subsection (5), the Board shall determine, using the prescribed criteria, whether the constructor or employer has demonstrated a failure to protect the health and safety of workers and shall consider such other matters as may be prescribed. R.S.O. 1990, c. O.1, s. 46 (6); 1998, c. 8, s. 53 (6).

Decision final

(7) The decision of the Board on an application is final. R.S.O. 1990, c. O.1, s. 46 (7); 1998, c. 8, s. 53 (7).

Costs of inspector

(8) The employer shall reimburse the Province of Ontario for the wages, benefits and expenses of an inspector assigned to the employer as recommended by the Board. 1998, c. 8, s. 53 (8).

Section Amendments with date in force (d/m/y)

1998, c. 8, s. 53 - 29/06/1998

Unilateral work stoppage

47 (1) This section applies, and section 45 does not apply, to a constructor or an employer,

- (a) against whom the Board has issued a declaration under section 46;
or

- (b) who advises the committee at a workplace in writing that the constructor or employer adopts the procedures set out in this section respecting work stoppages. R.S.O. 1990, c. O.1, s. 47 (1); 1998, c. 8, s. 54.

Direction re work stoppage

(2) A certified member may direct the constructor or employer to stop specified work or to stop the use of any part of a workplace or of any equipment, machine, device, article or thing if the certified member finds that dangerous circumstances exist.

Constructor's or employer's duties

(3) The constructor or employer shall immediately comply with the direction and shall ensure that compliance is effected in a way that does not endanger a person.

Investigation by constructor, etc.

(4) After complying with the direction, the constructor or employer shall promptly investigate the matter in the presence of the certified member.

Investigation by inspector

(5) If the certified member and the constructor or employer do not agree whether dangerous circumstances exist, the constructor or employer or the certified member may request that an inspector investigate the matter and the inspector shall do so and provide them with a written decision.

Cancellation of direction

(6) After taking steps to remedy the dangerous circumstances, the constructor or employer may request the certified member or an inspector to cancel the direction.

Idem

(7) The certified member who made the direction or an inspector may cancel it. R.S.O. 1990, c. O.1, s. 47 (2-7).

Section Amendments with date in force (d/m/y)

1998, c. 8, s. 54 - 29/06/1998

Entitlement to investigate

48 (1) A certified member who receives a complaint that dangerous circumstances exist is entitled to investigate the complaint.

Entitlement to be paid

(2) The time spent by a certified member in exercising powers and carrying out duties under this section and sections 45 and 47 shall be deemed to be work time for which the member's employer shall pay the member at the regular or premium rate as may be proper. R.S.O. 1990, c. O.1, s. 48.

Complaint re direction to stop work

49 (1) A constructor, an employer, a worker at the workplace or a representative of a trade union that represents workers at the workplace may file a complaint with the Board if he, she or it has reasonable grounds to believe that a certified member at the workplace recklessly or in bad faith exercised or failed to exercise a power under section 45 or 47. R.S.O. 1990, c. O.1, s. 49 (1); 1998, c. 8, s. 55 (1).

Limitation

(2) A complaint must be filed not later than 30 days after the event to which the complaint relates. R.S.O. 1990, c. O.1, s. 49 (2); 1998, c. 8, s. 55 (2).

Minister a party

(3) The Minister is entitled to be a party to a proceeding before the Board. R.S.O. 1990, c. O.1, s. 49 (3); 1998, c. 8, s. 55 (3).

Board procedure, etc.

(3.1) Subsections 61 (2) to (3.13) and subsection 61 (8) apply, with necessary modifications, with respect to complaints under this section. 1998, c. 8, s. 55 (4).

Determination of complaint

(4) The Board shall make a decision respecting the complaint and may make such order as it considers appropriate in the circumstances including an order decertifying a certified member. 1998, c. 8, s. 55 (5).

Decision final

(5) The decision of the Board is final. R.S.O. 1990, c. O.1, s. 49 (5); 1998, c. 8, s. 55 (6).

Section Amendments with date in force (d/m/y)

1998, c. 8, s. 55 - 29/06/1998

PART VI

REPRISALS BY EMPLOYER PROHIBITED

No discipline, dismissal, etc., by employer

50 (1) No employer or person acting on behalf of an employer shall,

- (a) dismiss or threaten to dismiss a worker;
- (b) discipline or suspend or threaten to discipline or suspend a worker;
- (c) impose any penalty upon a worker; or
- (d) intimidate or coerce a worker,

because the worker has acted in compliance with this Act or the regulations or an order made thereunder, has sought the enforcement of this Act or the regulations or has given evidence in a proceeding in respect of the enforcement of this Act or the regulations or in an inquest under the *Coroners Act*. R.S.O. 1990, c. O.1, s. 50 (1).

Arbitration

(2) Where a worker complains that an employer or person acting on behalf of an employer has contravened subsection (1), the worker may either have the matter dealt with by final and binding settlement by arbitration under a collective agreement, if any, or file a complaint with the Board in which case any rules governing the practice and procedure of the Board apply with all necessary modifications to the complaint. 1998, c. 8, s. 56 (1).

Referral by inspector

(2.1) Where the circumstances warrant, an inspector may refer a matter to the Board if the following conditions are met:

1. The worker has not had the matter dealt with by final and binding settlement by arbitration under a collective agreement or filed a complaint with the Board under subsection (2).
2. The worker consents to the referral. 2011, c. 11, s. 13 (1).

Same

(2.2) Any rules governing the practice and procedure of the Board apply with all necessary modifications to a referral made under subsection (2.1). 2011, c. 11, s. 13 (1).

Referral not an order

(2.3) A referral made under subsection (2.1) is not an order or decision for

the purposes of section 61. 2011, c. 11, s. 13 (1).

Inquiry by Board

(3) The Board may inquire into any complaint filed under subsection (2) or referral made under subsection (2.1) and section 96 of the *Labour Relations Act, 1995*, except subsection (5), applies with all necessary modifications as if such section, except subsection (5), is enacted in and forms part of this Act. 1998, c. 8, s. 56 (1); 2011, c. 11, s. 13 (2).

Same

(4) On an inquiry by the Board into a complaint filed under subsection (2) or a referral made under subsection (2.1), sections 110, 111, 114 and 116 of the *Labour Relations Act, 1995* apply with all necessary modifications. 1998, c. 8, s. 56 (1); 2011, c. 11, s. 13 (3).

Rules to expedite proceedings

(4.1) The chair of the Board may make rules under subsection 110 (18) of the *Labour Relations Act, 1995* to expedite proceedings relating to a complaint filed under subsection (2) or a referral made under subsection (2.1). 2011, c. 11, s. 13 (4).

Same

(4.2) Subsections 110 (20), (21) and (22) of the *Labour Relations Act, 1995* apply, with necessary modifications, to rules made under subsection (4.1). 2011, c. 11, s. 13 (4); 2018, c. 14, Sched. 2, s. 21.

Onus of proof

(5) On an inquiry by the Board into a complaint filed under subsection (2) or a referral made under subsection (2.1), the burden of proof that an employer or person acting on behalf of an employer did not act contrary to subsection (1) lies upon the employer or the person acting on behalf of the employer. R.S.O. 1990, c. O.1, s. 50 (5); 1998, c. 8, s. 56 (2); 2011, c. 11, s. 13 (5).

Jurisdiction when complaint by public servant

(6) The Board shall exercise jurisdiction under this section when a complaint filed under subsection (2) or a referral made under subsection (2.1) is in respect of a worker who is a public servant within the meaning of the *Public Service of Ontario Act, 2006*. 2011, c. 11, s. 13 (6).

Board may substitute penalty

(7) Where on an inquiry by the Board into a complaint filed under

subsection (2) or a referral made under subsection (2.1), the Board determines that a worker has been discharged or otherwise disciplined by an employer for cause and the contract of employment or the collective agreement, as the case may be, does not contain a specific penalty for the infraction, the Board may substitute such other penalty for the discharge or discipline as to the Board seems just and reasonable in all the circumstances. 1995, c. 1, s. 84 (1); 1998, c. 8, s. 56 (4); 2011, c. 11, s. 13 (7).

Note: A complaint under subsection 50 (2) in which a final decision has not been issued on November 10, 1995 shall be decided as if subsection 50 (7), as re-enacted by the Statutes of Ontario, 1995, chapter 1, subsection 84 (1), were in force at all material times. See: 1995, c. 1, s. 84 (2).

Exception

(8) Despite subsections (2) and (2.1), a person who is subject to a rule or code of discipline under the *Police Services Act* shall have his or her complaint in relation to an alleged contravention of subsection (1) dealt with under that Act. R.S.O. 1990, c. O.1, s. 50 (8); 2011, c. 11, s. 13 (8).

Note: On a day to be named by proclamation of the Lieutenant Governor, subsection 50 (8) of the Act is repealed and the following substituted: (See: 2019, c. 1, Sched. 4, s. 39 (2))

Exception

(8) Despite subsections (2) and (2.1), a police officer under the *Community Safety and Policing Act, 2019* shall have his or her complaint in relation to an alleged contravention of subsection (1) dealt with under section 191 of that Act, with necessary modifications. 2019, c. 1, Sched. 4, s. 39 (2).

Section Amendments with date in force (d/m/y)

1995, c. 1, s. 84 (1-2) - 10/11/1995

1998, c. 8, s. 56 (1-4) - 29/06/1998

2006, c. 35, Sched. C, s. 93 (5) - 20/08/2007

2011, c. 11, s. 13 - 01/04/2012

2018, c. 3, Sched. 5, s. 41 (2) - no effect - see 2019, c. 1, Sched. 3, s. 5 - 26/03/2019; 2018, c. 14, Sched. 2, s. 21 - 21/11/2018

2019, c. 1, Sched. 4, s. 39 (2) - not in force

Offices of the Worker and Employer Advisers

Office of the Worker Adviser

50.1 (1) In addition to the functions set out in section 176 of the *Workplace Safety and Insurance Act, 1997*, the Office of the Worker Adviser has the functions prescribed for the purposes of this Part, with respect to workers who are not members of a trade union. 2011, c. 11, s. 14.

Office of the Employer Adviser

(2) In addition to the functions set out in section 176 of the *Workplace Safety and Insurance Act, 1997*, the Office of the Employer Adviser has the functions prescribed for the purposes of this Part, with respect to employers that have fewer than 100 employees or such other number as may be prescribed. 2011, c. 11, s. 14.

Costs

(3) In determining the amount of the costs that may be incurred by each office under subsection 176 (3) of the *Workplace Safety and Insurance Act, 1997*, the Minister shall take into account any functions prescribed for the purposes of this Part. 2011, c. 11, s. 14.

Section Amendments with date in force (d/m/y)

2011, c. 11, s. 14 - 1/04/2012

PART VII NOTICES

Notice of death or injury

51 (1) Where a person is killed or critically injured from any cause at a workplace, the constructor, if any, and the employer shall notify an inspector, and the committee, health and safety representative and trade union, if any, immediately of the occurrence by telephone or other direct means and the employer shall, within forty-eight hours after the occurrence, send to a Director a written report of the circumstances of the occurrence containing such information and particulars as the regulations prescribe. R.S.O. 1990, c. O.1, s. 51 (1); 2011, c. 1, Sched. 7, s. 2 (7).

Preservation of wreckage

(2) Where a person is killed or is critically injured at a workplace, no person shall, except for the purpose of,

- (a) saving life or relieving human suffering;
- (b) maintaining an essential public utility service or a public

transportation system; or

(c) preventing unnecessary damage to equipment or other property, interfere with, disturb, destroy, alter or carry away any wreckage, article or thing at the scene of or connected with the occurrence until permission so to do has been given by an inspector. R.S.O. 1990, c. O.1, s. 51 (2).

Section Amendments with date in force (d/m/y)

2011, c. 1, Sched. 7, s. 2 (7) - 30/03/2011

Notice of accident, explosion, fire or violence causing injury

52 (1) If a person is disabled from performing his or her usual work or requires medical attention because of an accident, explosion, fire or incident of workplace violence at a workplace, but no person dies or is critically injured because of that occurrence, the employer shall, within four days of the occurrence, give written notice of the occurrence containing the prescribed information and particulars to the following:

1. The committee, the health and safety representative and the trade union, if any.
2. The Director, if an inspector requires notification of the Director. 2001, c. 9, Sched. I, s. 3 (12); 2009, c. 23, s. 5.

Notice of occupational illness

(2) If an employer is advised by or on behalf of a worker that the worker has an occupational illness or that a claim in respect of an occupational illness has been filed with the Workplace Safety and Insurance Board by or on behalf of the worker, the employer shall give notice in writing, within four days of being so advised, to a Director, to the committee or a health and safety representative and to the trade union, if any, containing such information and particulars as are prescribed. R.S.O. 1990, c. O.1, s. 52 (2); 1997, c. 16, s. 2 (12).

Idem

(3) Subsection (2) applies with all necessary modifications if an employer is advised by or on behalf of a former worker that the worker has or had an occupational illness or that a claim in respect of an occupational illness has been filed with the Workplace Safety and Insurance Board by or on behalf of the worker. R.S.O. 1990, c. O.1, s. 52 (3); 1997, c. 16, s. 2 (13).

Section Amendments with date in force (d/m/y)

1997, c. 16, s. 2 (12, 13) - 1/01/1998

2001, c. 9, Sched. I, s. 3 (12) - 29/06/2001

2009, c. 23, s. 5 - 15/06/2010

Accident, etc., at project site or mine

53 (1) If an accident, premature or unexpected explosion, fire, flood or inrush of water, failure of any equipment, machine, device, article or thing, cave-in, subsidence, rockburst, or other prescribed incident occurs at a project site, mine, mining plant or other prescribed location, the person determined under subsection (2) shall, within two days after the occurrence, give notice in writing with the prescribed information and particulars,

- (a) to the committee, health and safety representative and trade union, if any; and
- (b) to a Director, unless a report under section 51 or a notice under section 52 has already been given to a Director. 2011, c. 1, Sched. 7, s. 2 (8); 2017, c. 34, Sched. 30, s. 2 (1).

Person required to notify

(2) The person required to give notice under subsection (1) is,

- (a) if the incident takes place at a project site, the constructor of the project;
- (b) if the incident occurs at a mine or a mining plant, the employer of a worker who works in the mine or plant; or
- (c) if the incident occurs at a prescribed location, the person prescribed for that location. 2017, c. 34, Sched. 30, s. 2 (2).

Section Amendments with date in force (d/m/y)

2011, c. 1, Sched. 7, s. 2 (8) - 30/03/2011

2017, c. 34, Sched. 30, s. 2 (1, 2) - 14/12/2017

Additional notices

53.1 In addition to the notice requirements set out in sections 51, 52 and 53, the regulations may specify additional notice requirements that must be met in the circumstances described in those sections, including specifying who is required to provide the notice, the timeframe in which it shall be provided and the information and particulars it must contain. 2017, c. 34, Sched. 30, s. 3.

Section Amendments with date in force (d/m/y)

2017, c. 34, Sched. 30, s. 3 - 14/12/2017

**PART VIII
ENFORCEMENT****Powers of inspector**

54 (1) An inspector may, for the purposes of carrying out his or her duties and powers under this Act and the regulations,

- (a) subject to subsection (2), enter in or upon any workplace at any time without warrant or notice;
- (b) take up or use any machine, device, article, thing, material or biological, chemical or physical agent or part thereof;
- (c) require the production of any drawings, specifications, licence, document, record or report, and inspect, examine and copy the same;
- (d) upon giving a receipt therefor, remove any drawings, specifications, licence, document, record or report inspected or examined for the purpose of making copies thereof or extracts therefrom, and upon making copies thereof or extracts therefrom, shall promptly return the same to the person who produced or furnished them;
- (e) conduct or take tests of any equipment, machine, device, article, thing, material or biological, chemical or physical agent in or about a workplace and for such purposes, take and carry away such samples as may be necessary;
- (f) require in writing an employer to cause any tests described in clause (e) to be conducted or taken, at the expense of the employer, by a person possessing such special expert or professional knowledge or qualifications as are specified by the inspector and to provide, at the expense of the employer, a report or assessment by that person;
- (g) in any inspection, examination, inquiry or test, be accompanied and assisted by or take with him or her any person or persons having special, expert or professional knowledge of any matter, take photographs, and take with him or her and use any equipment or materials required for such purpose;
- (h) make inquiries of any person who is or was in a workplace either separate and apart from another person or in the presence of any other person that are or may be relevant to an inspection,

examination, inquiry or test;

- (i) require that a workplace or part thereof not be disturbed for a reasonable period of time for the purposes of carrying out an examination, investigation or test;
- (j) require that any equipment, machine, device, article, thing or process be operated or set in motion or that a system or procedure be carried out that may be relevant to an examination, inquiry or test;
- (k) require in writing an employer to have equipment, machinery or devices tested, at the expense of the employer, by a professional engineer and to provide, at the expense of the employer, a report bearing the seal and signature of the professional engineer stating that the equipment, machine or device is not likely to endanger a worker;
- (l) require in writing that any equipment, machinery or device not be used pending testing described in clause (k);
- (m) require in writing an owner, constructor or employer to provide, at the expense of the owner, constructor or employer, a report bearing the seal and signature of a professional engineer stating,
 - (i) the load limits of a building, structure, or any part thereof, or any other part of a workplace, whether temporary or permanent,
 - (ii) that a building, structure, or any part thereof, or any other part of a workplace, whether temporary or permanent, is capable of supporting or withstanding the loads being applied to it or likely to be applied to it, or
 - (iii) that a building, structure, or any part thereof, or any other part of a workplace, whether temporary or permanent, is capable of supporting any loads that may be applied to it,
 - (A) as determined by the applicable design requirements established under the version of the Building Code that was in force at the time of its construction,
 - (B) in accordance with such other requirements as may be prescribed, or
 - (C) in accordance with good engineering practice, if subclauses (A) and (B) do not apply;
- (n) require in writing an owner of a mine or part thereof to provide,

at the owner's expense, a report in writing bearing the seal and signature of a professional engineer stating that the ground stability of, the mining methods and the support or rock reinforcement used in the mine or part thereof is such that a worker is not likely to be endangered;

- (o) require in writing, within such time as is specified, a person who is an employer, manufacturer, producer, importer, distributor or supplier to produce records or information, or to provide, at the expense of the person, a report or evaluation made or to be made by a person or organization having special, expert or professional knowledge or qualifications as are specified by the inspector of any process or biological, chemical or physical agents or combination of such agents present, used or intended for use in a workplace and the manner of use, including,
 - (i) the ingredients thereof and their common or generic name or names,
 - (ii) the composition and the properties thereof,
 - (iii) the toxicological effect thereof,
 - (iv) the effect of exposure thereto whether by contact, inhalation or ingestion,
 - (v) the protective measures used or to be used in respect thereof,
 - (vi) the emergency measures used or to be used to deal with exposure in respect thereof, and
 - (vii) the effect of the use, transport and disposal thereof; and
- (p) require the production of any materials concerning the content, frequency and manner of instruction of any training program and inspect, examine and copy the materials and attend any such program. R.S.O. 1990, c. O.1, s. 54 (1); 2011, c. 11, s. 15.

Entry to dwellings

(2) An inspector may only enter a dwelling or that part of a dwelling actually being used as a workplace with the consent of the occupier or under the authority of a warrant issued under this Act or the *Provincial Offences Act*. 2001, c. 26, s. 1.

Representative to accompany inspector

(3) Where an inspector makes an inspection of a workplace under the powers conferred upon him or her under subsection (1), the constructor,

employer or group of employers shall afford a committee member representing workers or a health and safety representative, if any, or a worker selected by a trade union or trade unions, if any, because of knowledge, experience and training, to represent it or them and, where there is no trade union, a worker selected by the workers because of knowledge, training and experience to represent them, the opportunity to accompany the inspector during his or her physical inspection of a workplace, or any part or parts thereof. R.S.O. 1990, c. O.1, s. 54 (3).

Consultation with workers

(4) Where there is no committee member representing workers, no health and safety representative or worker selected under subsection (3), the inspector shall endeavour to consult during his or her physical inspection with a reasonable number of the workers concerning matters of health and safety at their work. R.S.O. 1990, c. O.1, s. 54 (4).

Entitlement to time from work

(5) The time spent by a committee member representing workers, a health and safety representative or a worker selected in accordance with subsection (3) in accompanying an inspector during his or her physical inspection, shall be deemed to be work time for which he or she shall be paid by his or her employer at his or her regular or premium rate as may be proper. R.S.O. 1990, c. O.1, s. 54 (5).

Section Amendments with date in force (d/m/y)

2001, c. 26, s. 1 - 12/12/2001

2011, c. 11, s. 15 - 1/06/2011

Order for inspections

55 Subject to subsections 8 (6) and 9 (26), an inspector may in writing direct a health and safety representative or a member designated under subsection 9 (23) to inspect the physical condition of all or part of a workplace at specified intervals. R.S.O. 1990, c. O.1, s. 55; 2009, c. 33, Sched. 20, s. 3 (2).

Section Amendments with date in force (d/m/y)

2009, c. 33, Sched. 20, s. 3 (2) - 15/12/2009

Order for written policies

55.1 In the case of a workplace at which the number of workers regularly employed is five or fewer, an inspector may in writing order that the policies with respect to workplace violence and workplace harassment required

under section 32.0.1 be in written form and posted at a conspicuous place in the workplace. 2009, c. 23, s. 6; 2011, c. 1, Sched. 7, s. 2 (9).

Section Amendments with date in force (d/m/y)

2009, c. 23, s. 6 - 15/06/2010

2011, c. 1, Sched. 7, s. 2 (9) - 30/03/2011

Order for written assessment, etc.

55.2 An inspector may in writing order that the following be in written form:

1. The assessment of the risks of workplace violence required under subsection 32.0.3 (1).
2. A reassessment required under subsection 32.0.3 (4). 2009, c. 23, s. 6.

Section Amendments with date in force (d/m/y)

2009, c. 23, s. 6 - 15/06/2010

Order for workplace harassment investigation

55.3 (1) An inspector may in writing order an employer to cause an investigation described in clause 32.0.7 (1) (a) to be conducted, at the expense of the employer, by an impartial person possessing such knowledge, experience or qualifications as are specified by the inspector and to obtain, at the expense of the employer, a written report by that person. 2016, c. 2, Sched. 4, s. 4.

Report

(2) A report described in subsection (1) is not a report respecting occupational health and safety for the purposes of subsection 25 (2). 2016, c. 2, Sched. 4, s. 4.

Section Amendments with date in force (d/m/y)

2016, c. 2, Sched. 4, s. 4 - 08/09/2016

Warrants – investigative techniques, etc.

56 (1) On application without notice, a justice of the peace or a provincial judge may issue a warrant authorizing an inspector, subject to this section, to use any investigative technique or procedure or to do any thing described in the warrant if the justice of the peace or provincial judge, as the case may be, is satisfied by information under oath that there are reasonable grounds to believe that an offence against this Act or

the regulations has been or is being committed and that information and other evidence concerning the offence will be obtained through the use of the technique or procedure or the doing of the thing. 2001, c. 26, s. 2.

Expert help

(1.1) The warrant may authorize persons who have special, expert or professional knowledge to accompany and assist the inspector in the execution of the warrant. 2001, c. 26, s. 2.

Terms and conditions of warrant

(1.2) The warrant shall authorize the inspector to enter and search the place for which the warrant was issued and, without limiting the powers of the justice of the peace or the provincial judge under subsection (1), the warrant may, in respect of the alleged offence, authorize the inspector to,

- (a) seize or examine and copy any drawings, specifications, licence, document, record or report;
- (b) seize or examine any equipment, machine, device, article, thing, material or biological, chemical or physical agent;
- (c) require a person to produce any item described in clause (a) or (b);
- (d) conduct or take tests of any equipment, machine, device, article, thing, material or biological, chemical or physical agent, and take and carry away samples from the testing;
- (e) take measurements of and record by any means the physical circumstances of the workplace; and
- (f) make inquiries of any person either separate and apart from another person or in the presence of any other person. 2001, c. 26, s. 2.

Duration

(1.3) The warrant is valid for 30 days or for such shorter period as may be specified in it. 2001, c. 26, s. 2.

Other terms and conditions

(1.4) The warrant may contain terms and conditions in addition to those provided for in subsections (1) to (1.3) as the justice of the peace or provincial judge, as the case may be, considers advisable in the circumstances. 2001, c. 26, s. 2.

Further warrants

(1.5) A justice of the peace or provincial judge may issue further warrants under subsection (1). 2001, c. 26, s. 2.

Powers, duties not restricted

(1.6) Nothing in this section restricts any power or duty of an inspector under this Act or the regulations. 2001, c. 26, s. 2.

Possession

(2) The inspector may remove any thing seized under a warrant from the place from which it was seized or may detain it in that place. 2001, c. 26, s. 2.

Notice and receipt

(3) The inspector shall inform the person from whom the thing is seized as to the reason for the seizure and shall give the person a receipt for it. R.S.O. 1990, c. O.1, s. 56 (3).

Report to justice

(4) The inspector shall bring a thing seized under the authority of this section before a provincial judge or justice of the peace or, if that is not reasonably possible, shall report the seizure to a provincial judge or justice of the peace. R.S.O. 1990, c. O.1, s. 56 (4).

Procedure

(5) Sections 159 and 160 of the *Provincial Offences Act* apply with necessary modifications in respect of a thing seized under the authority of this section. R.S.O. 1990, c. O.1, s. 56 (5).

Section Amendments with date in force (d/m/y)

2001, c. 26, s. 2 - 12/12/2001

Power of inspector to seize

56.1 (1) An inspector who executes a warrant issued under section 56 may seize or examine and copy any drawings, specifications, licence, document, record or report or seize or examine any equipment, machine, device, article, thing, material or biological, chemical or physical agent, in addition to those mentioned in the warrant, that he or she believes on reasonable grounds will afford evidence in respect of an offence under this Act or the regulations. 2001, c. 26, s. 3.

Searches in exigent circumstances

(2) Although a warrant issued under section 56 would otherwise be required, an inspector may exercise any of the powers described in subsection 56 (1) without a warrant if the conditions for obtaining the warrant exist but by reason of exigent circumstances it would be impracticable to obtain the warrant. 2001, c. 26, s. 3.

Report to justice, etc.

(3) Subsections 56 (3), (4) and (5) apply with necessary modifications to a thing seized under this section. 2001, c. 26, s. 3.

Section Amendments with date in force (d/m/y)

2001, c. 26, s. 3 - 12/12/2001

Orders by inspectors where non-compliance

57 (1) Where an inspector finds that a provision of this Act or the regulations is being contravened, the inspector may order, orally or in writing, the owner, constructor, licensee, employer, or person whom he or she believes to be in charge of a workplace or the person whom the inspector believes to be the contravener to comply with the provision and may require the order to be carried out forthwith or within such period of time as the inspector specifies. R.S.O. 1990, c. O.1, s. 57 (1).

Idem

(2) Where an inspector makes an oral order under subsection (1), the inspector shall confirm the order in writing before leaving the workplace. R.S.O. 1990, c. O.1, s. 57 (2).

Contents of order

(3) An order made under subsection (1) shall indicate generally the nature of the contravention and where appropriate the location of the contravention. R.S.O. 1990, c. O.1, s. 57 (3).

Compliance plan

(4) An order made under subsection (1) may require a constructor, a licensee or an employer to submit to the Ministry a compliance plan prepared in the manner and including such items as required by the order. R.S.O. 1990, c. O.1, s. 57 (4).

Idem

(5) The compliance plan shall specify what the constructor, licensee or employer plans to do to comply with the order and when the constructor,

licensee or employer intends to achieve compliance. R.S.O. 1990, c. O.1, s. 57 (5).

Orders by inspector where worker endangered

(6) Where an inspector makes an order under subsection (1) and finds that the contravention of this Act or the regulations is a danger or hazard to the health or safety of a worker, the inspector may,

- (a) order that any place, equipment, machine, device, article or thing or any process or material shall not be used until the order is complied with;
- (b) order that the work at the workplace as indicated in the order shall stop until the order to stop work is withdrawn or cancelled by an inspector after an inspection;
- (c) order that the workplace where the contravention exists be cleared of workers and isolated by barricades, fencing or any other means suitable to prevent access thereto by a worker until the danger or hazard to the health or safety of a worker is removed. R.S.O. 1990, c. O.1, s. 57 (6).

Resumption of work pending inspection

(7) Despite clause (6) (b), a constructor, a licensee or an employer who gives notice to an inspector of compliance with an order made under subsection (6) may resume work pending an inspection and decision by an inspector respecting compliance with the order if, before the resumption of work, a committee member representing workers or a health and safety representative, as the case may be, advises an inspector that in his or her opinion the order has been complied with. R.S.O. 1990, c. O.1, s. 57 (7).

Additional orders

(8) In addition to the orders that may be made under subsection (6), where an inspector makes an order under subsection (1) for a contravention of section 37 or 41 or a Director has been advised of an employer's inability to obtain a current safety data sheet, the inspector may order that the hazardous material shall not be used or that the thing that causes, emits or produces the hazardous physical agent not be used or operated until the order is withdrawn or cancelled. R.S.O. 1990, c. O.1, s. 57 (8); 2015, c. 27, Sched. 4, s. 6.

Posting of notice

(9) Where an inspector makes an order under this section, he or she may affix to the workplace, or to any equipment, machine, device, article or

thing, a copy thereof or a notice of the order, in a form obtained from the Ministry, and no person, except an inspector, shall remove such copy or notice unless authorized to do so by an inspector. R.S.O. 1990, c. O.1, s. 57 (9); 2011, c. 1, Sched. 7, s. 2 (10).

Same

(10) Where an inspector makes an order in writing or issues a report of his or her inspection to an owner, constructor, licensee, employer or person in charge of the workplace,

- (a) the owner, constructor, licensee, employer or person in charge of the workplace shall forthwith cause a copy or copies of it to be posted in a conspicuous place or places at the workplace where it is most likely to come to the attention of the workers and shall furnish a copy of the order or report to the health and safety representative and the committee, if any; and
- (b) if the order or report resulted from a complaint of a contravention of this Act or the regulations and the person who made the complaint requests a copy of it, the inspector shall cause a copy of it to be furnished to that person. 2001, c. 9, Sched. I, s. 3 (13).

No hearing required prior to making order

(11) An inspector is not required to hold or afford to an owner, constructor, licensee, employer or any other person an opportunity for a hearing before making an order. R.S.O. 1990, c. O.1, s. 57 (11).

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (13) - 29/06/2001

2011, c. 1, Sched. 7, s. 2 (10) - 30/03/2011; 2011, c. 1, Sched. 7, s. 2 (12, 13) - no effect - see 2015, c. 27, Sched. 4, s. 11 - 03/12/2015

2015, c. 27, Sched. 4, s. 6 - 01/07/2016

Entry into barricaded area

58 Where an order is made under clause 57 (6) (c), no owner, constructor, employer or supervisor shall require or permit a worker to enter the workplace except for the purpose of doing work that is necessary or required to remove the danger or hazard and only where the worker is protected from the danger or hazard. R.S.O. 1990, c. O.1, s. 58.

Notice of compliance

59 (1) Within three days after a constructor or employer who has received an order under section 57 believes that compliance with the order has

been achieved, the constructor or employer shall submit to the Ministry a notice of compliance.

Idem

(2) The notice shall be signed by the constructor or employer and shall be accompanied by,

- (a) a statement of agreement or disagreement with the contents of the notice, signed by a member of the committee representing workers or by a health and safety representative, as the case may be; or
- (b) a statement that the member or representative has declined to sign the statement referred to in clause (a).

Idem

(3) The constructor or employer shall post the notice and the order issued under section 57 for a period of fourteen days following its submission to the Ministry in a place or places in the workplace where it is most likely to come to the attention of workers.

Compliance achieved

(4) Despite the submission of a notice of compliance, a constructor or employer achieves compliance with an order under section 57 when an inspector determines that compliance has been achieved. R.S.O. 1990, c. O.1, s. 59.

Injunction proceedings

60 In addition to any other remedy or penalty therefor, where an order made under subsection 57 (6) is contravened, such contravention may be restrained upon an application made without notice to a judge of the Superior Court of Justice made at the instance of a Director. R.S.O. 1990, c. O.1, s. 60; 2001, c. 9, Sched. I, s. 3 (14).

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (14) - 29/06/2001

Appeals from order of an inspector

61 (1) Any employer, constructor, licensee, owner, worker or trade union which considers himself, herself or itself aggrieved by any order made by an inspector under this Act or the regulations may appeal to the Board within 30 days after the making of the order. 1998, c. 8, s. 57 (1).

Parties

(2) The following are parties to the appeal:

1. The appellant.
2. In the case of an appeal by an employer, the employer's workers and each trade union representing any of the workers.
3. In the case of an appeal by a worker or trade union representing a worker, the worker's employer.
4. A Director.
5. Such other persons as the Board may specify. 1998, c. 8, s. 57 (2); 2011, c. 1, Sched. 7, s. 2 (11).

Inquiry by labour relations officer

(3) The Board may authorize a labour relations officer to inquire into an appeal. 1998, c. 8, s. 57 (2).

Same

(3.1) The labour relations officer shall forthwith inquire into the appeal and endeavour to effect a settlement of the matters raised in the appeal. 1998, c. 8, s. 57 (2).

Report to Board

(3.2) The labour relations officer shall report the results of his or her inquiry and endeavours to the Board. 1998, c. 8, s. 57 (2).

Hearings

(3.3) Subject to the rules made under subsection (3.8), the Board shall hold a hearing to consider the appeal unless the Board makes an order under subsection (3.4). 1998, c. 8, s. 57 (2).

Orders after consultation

(3.4) The Board may make any interim or final order it considers appropriate after consulting with the parties. 1998, c. 8, s. 57 (2).

Same

(3.5) The *Statutory Powers Procedure Act* does not apply with respect to a consultation the Board makes under subsection (3.4). 1998, c. 8, s. 57 (2).

Practice and procedure

(3.6) The Board shall determine its own practice and procedure but shall

give full opportunity to the parties to present their evidence and to make their submissions. 1998, c. 8, s. 57 (2).

Rules of practice

(3.7) The chair may make rules governing the Board's practice and procedure and the exercise of its powers and prescribing such forms as the chair considers advisable. 1998, c. 8, s. 57 (2).

Expedited appeals

(3.8) The chair of the Board may make rules to expedite appeals and such rules,

- (a) may provide that the Board is not required to hold a hearing; and
- (b) may limit the extent to which the Board is required to give full opportunity to the parties to present their evidence and to make their submissions. 1998, c. 8, s. 57 (2).

Effective date of rules

(3.9) Rules made under subsection (3.8) come into force on such dates as the Lieutenant Governor in Council may by order determine. 1998, c. 8, s. 57 (2).

Conflict with Statutory Powers Procedure Act

(3.10) Rules made under this section apply despite anything in the *Statutory Powers Procedure Act*. 1998, c. 8, s. 57 (2).

Rules not regulations

(3.11) Rules made under this section are not regulations within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. 1998, c. 8, s. 57 (2); 2006, c. 21, Sched. F, s. 136 (1).

Quorum

(3.12) The chair or a vice-chair of the Board constitutes a quorum for the purposes of this section and is sufficient for the exercise of the jurisdiction and powers of the Board under this section. 1998, c. 8, s. 57 (2).

Entering premises

(3.13) For the purposes of an appeal under this section, the Board may enter any premises where work is being or has been done by workers or in which the employer carries on business, whether or not the premises are those of the employer, and inspect and view any work, material, machinery, appliance or article therein, and interrogate any

person respecting any matter and post therein any notice that the Board considers necessary to bring to the attention of persons having an interest in the appeal. 1998, c. 8, s. 57 (2).

Powers of the Board

(4) On an appeal under this section, the Board may substitute its findings for those of the inspector who made the order appealed from and may rescind or affirm the order or make a new order in substitution therefor, and for such purpose has all the powers of an inspector and the order of the Board shall stand in the place of and have the like effect under this Act and the regulations as the order of the inspector. 1998, c. 8, s. 57 (2).

Order, extended meaning

(5) In this section, an order of an inspector under this Act or the regulations includes any order or decision made or given or the imposition of any terms or conditions therein by an inspector under the authority of this Act or the regulations or the refusal to make an order or decision by an inspector. R.S.O. 1990, c. O.1, s. 61 (5).

Decision of adjudicator final

(6) A decision of the Board under this section is final. R.S.O. 1990, c. O.1, s. 61 (6); 1998, c. 8, s. 57 (3).

Suspension of order by adjudicator pending disposition of appeal

(7) On an appeal under subsection (1), the Board may suspend the operation of the order appealed from pending the disposition of the appeal. R.S.O. 1990, c. O.1, s. 61 (7); 1998, c. 8, s. 57 (4).

Reconsideration

(8) The Board may at any time, if it considers it advisable to do so, reconsider any decision, order, direction, declaration or ruling made by it under this section and may vary or revoke any such decision, order, direction, declaration or ruling. 1998, c. 8, s. 57 (5).

Section Amendments with date in force (d/m/y)

1998, c. 8, s. 57 - 29/06/1998

2006, c. 21, Sched. F, s. 136 (1) - 25/07/2007

2011, c. 1, Sched. 7, s. 2 (11) - 30/03/2011

Obstruction of inspector

62 (1) No person shall hinder, obstruct, molest or interfere with or attempt

to hinder, obstruct, molest or interfere with an inspector in the exercise of a power or the performance of a duty under this Act or the regulations or in the execution of a warrant issued under this Act or the *Provincial Offences Act* with respect to a matter under this Act or the regulations. 2001, c. 26, s. 4.

Assistance

(2) Every person shall furnish all necessary means in the person's power to facilitate any entry, search, inspection, investigation, examination, testing or inquiry by an inspector,

- (a) in the exercise of his or her powers or the performance of his or her duties under this Act or the regulations; or
- (b) in the execution of a warrant issued under this Act or the *Provincial Offences Act* with respect to a matter under this Act or the regulations. 2001, c. 26, s. 4.

False information, etc.

(3) No person shall knowingly furnish an inspector with false information or neglect or refuse to furnish information required by an inspector,

- (a) in the exercise of his or her powers or the performance of his or her duties under this Act or the regulations; or
- (b) in the execution of a warrant issued under this Act or the *Provincial Offences Act* with respect to a matter under this Act or the regulations. 2001, c. 26, s. 4.

Monitoring devices

(4) No person shall interfere with any monitoring equipment or device in a workplace. R.S.O. 1990, c. O.1, s. 62 (4).

Obstruction of committee, etc.

(5) No person shall knowingly,

- (a) hinder or interfere with a committee, a committee member or a health and safety representative in the exercise of a power or performance of a duty under this Act;
- (b) furnish a committee, a committee member or a health and safety representative with false information in the exercise of a power or performance of a duty under this Act; or
- (c) hinder or interfere with a worker selected by a trade union or trade unions or a worker selected by the workers to represent them in

the exercise of a power or performance of a duty under this Act. R.S.O. 1990, c. O.1, s. 62 (5).

Section Amendments with date in force (d/m/y)

2001, c. 26, s. 4 - 12/12/2001

Information confidential

63 (1) Except for the purposes of this Act and the regulations or as required by law,

- (a) an inspector, a person accompanying an inspector or a person who, at the request of an inspector, makes an examination, test or inquiry, shall not publish, disclose or communicate to any person any information, material, statement, report or result of any examination, test or inquiry acquired, furnished, obtained, made or received under the powers conferred under this Act or the regulations;
- (b) REPEALED: 1992, c. 14, s. 2 (2).
- (c) no person shall publish, disclose or communicate to any person any secret manufacturing process or trade secret acquired, furnished, obtained, made or received under the provisions of this Act or the regulations;
- (d) REPEALED: 1992, c. 14, s. 2 (3).
- (e) no person to whom information is communicated under this Act and the regulations shall divulge the name of the informant to any person; and
- (f) no person shall disclose any information obtained in any medical examination, test or x-ray of a worker made or taken under this Act except in a form calculated to prevent the information from being identified with a particular person or case. R.S.O. 1990, c. O.1, s. 63 (1); 1992, c. 14, s. 2 (2, 3).

Employer access to health records

(2) No employer shall seek to gain access, except by an order of the court or other tribunal or in order to comply with another statute, to a health record concerning a worker without the worker's written consent. R.S.O. 1990, c. O.1, s. 63 (2).

Compellability, civil suit

(3) An inspector or a person who, at the request of an inspector, accompanies an inspector, or a person who makes an examination,

test, inquiry or takes samples at the request of an inspector, is not a compellable witness in a civil suit or any proceeding, except an inquest under the *Coroners Act*, respecting any information, material, statement or test acquired, furnished, obtained, made or received under this Act or the regulations. R.S.O. 1990, c. O.1, s. 63 (3).

Compellability of witnesses

(3.1) Persons employed in the Office of the Worker Adviser or the Office of the Employer Adviser are not compellable witnesses in a civil suit or any proceeding respecting any information or material furnished to or obtained, made or received by them under this Act while acting within the scope of their employment. 2011, c. 11, s. 16.

Exception

(3.2) If the Office of the Worker Adviser or the Office of the Employer Adviser is a party to a proceeding, a person employed in the relevant Office may be determined to be a compellable witness. 2011, c. 11, s. 16.

Production of documents

(3.3) Persons employed in the Office of the Worker Adviser or the Office of the Employer Adviser are not required to produce, in a proceeding in which the relevant Office is not a party, any information or material furnished to or obtained, made or received by them under this Act while acting within the scope of their employment. 2011, c. 11, s. 16.

Power of Director to disclose

(4) A Director may communicate or allow to be communicated or disclosed information, material, statements or the result of a test acquired, furnished, obtained, made or received under this Act or the regulations. R.S.O. 1990, c. O.1, s. 63 (4).

Medical emergencies

(5) Subsection (1) does not apply so as to prevent any person from providing any information in the possession of the person, including confidential business information, in a medical emergency for the purpose of diagnosis or treatment. R.S.O. 1990, c. O.1, s. 63 (5).

Conflict

(6) This section prevails despite anything to the contrary in the *Personal Health Information Protection Act, 2004*. 2004, c. 3, Sched. A, s. 93.

Section Amendments with date in force (d/m/y)

1992, c. 14, s. 2 (2, 3) - 25/06/1992

2004, c. 3, Sched. A, s. 93 - 1/11/2004

2011, c. 11, s. 16 - 1/04/2012

Copies of reports

64 A Director may, upon receipt of a request in writing from the owner of a workplace who has entered into an agreement to sell the same and upon payment of the fee or fees prescribed, furnish to the owner or a person designated by the owner copies of reports or orders of an inspector made under this Act in respect of the workplace as to its compliance with subsection 29 (1). R.S.O. 1990, c. O.1, s. 64.

Immunity

65 (1) No action or other proceeding for damages, prohibition or mandamus shall be instituted respecting any act done in good faith in the execution or intended execution of a person's duties under this Act or in the exercise or intended exercise of a person's powers under this Act or for any alleged neglect or default in the execution or performance in good faith of the person's duties or powers if the person is,

- (a) an employee in the Ministry or a person who acts as an advisor for the Ministry;
- (b) an employee in the Office of the Worker Adviser or the Office of the Employer Adviser;
- (c) the Board or a labour relations officer;
- (d) a health and safety representative or a committee member; or
- (e) a worker selected by a trade union or trade unions or by workers to represent them. R.S.O. 1990, c. O.1, s. 65 (1); 1995, c. 5, s. 32; 1997, c. 16, s. 2 (14, 15); 1998, c. 8, s. 58; 2006, c. 35, Sched. C, s. 93 (6); 2011, c. 11, s. 17 (1).

Liability of Crown

(2) Subsection (1) does not, by reason of subsection 8 (3) of the *Crown Liability and Proceedings Act, 2019*, relieve the Crown of liability in respect of a tort committed by a Director, the Chief Prevention Officer, an inspector or an engineer of the Ministry to which it would otherwise be subject and the Crown is liable under that Act for any such tort in a like manner as if subsection (1) had not been enacted. R.S.O. 1990, c. O.1, s. 65 (2); 2011, c. 11, s. 17 (2); 2019, c. 7, Sched. 17, s. 127.

Section Amendments with date in force (d/m/y)

1995, c. 5, s. 32 - 23/08/1995; 1997, c. 16, s. 2 (14, 15) - 1/01/1998; 1998, c. 8, s. 58 - 29/06/1998

2006, c. 35, Sched. C, s. 93 (6) - 20/08/2007

2011, c. 11, s. 17 - 01/04/2012

2019, c. 7, Sched. 17, s. 127 - 01/07/2019

**PART IX
OFFENCES AND PENALTIES****Penalties**

66 (1) Every person who contravenes or fails to comply with,

- (a) a provision of this Act or the regulations;
- (b) an order or requirement of an inspector or a Director; or
- (c) an order of the Minister,

is guilty of an offence and on conviction is liable to a fine of not more than \$500,000 or to imprisonment for a term of not more than twelve months, or to both. R.S.O. 1990, c. O.1, s. 66 (1); 2017, c. 34, Sched. 30, s. 4 (1); 2022, c. 7, Sched. 4, s. 2 (1)

Same

(2) If a corporation is convicted of an offence under subsection (1), the maximum fine that may be imposed upon the corporation is \$1,500,000. 2022, c. 7, Sched. 4, s. 2 (2).

Same

(2.1) A director or officer of a corporation who contravenes or fails to comply with section 32 is guilty of an offence and on conviction is liable to a fine of not more than \$1,500,000 or to imprisonment for a term of not more than twelve months, or to both. 2022, c. 7, Sched. 4, s. 2 (2).

Aggravating factors

(2.2) Each of the following circumstances shall be considered an aggravating factor for the purposes of determining a penalty under this section:

1. The offence resulted in the death, serious injury or illness of one or more workers.
2. The defendant committed the offence recklessly.

3. The defendant disregarded an order of an inspector.
4. The defendant was previously convicted of an offence under this or another Act.
5. The defendant has a record of prior non-compliance with this Act or the regulations.
6. The defendant lacks remorse.
7. There is an element of moral blameworthiness to the defendant's conduct.
8. In committing the offence, the defendant was motivated by a desire to increase revenue or decrease costs.
9. After the commission of the offence, the defendant,
 - i. attempted to conceal the commission of the offence from the Ministry or other public authorities, or
 - ii. failed to co-operate with the Ministry or other public authorities.
10. Any other circumstance that is prescribed as an aggravating factor. 2022, c. 7, Sched. 4, s. 2 (2).

Defence

(3) On a prosecution for a failure to comply with,

- (a) subsection 23 (1);
- (b) clause 25 (1) (b), (c) or (d); or
- (c) subsection 27 (1),

it shall be a defence for the accused to prove that every precaution reasonable in the circumstances was taken. R.S.O. 1990, c. O.1, s. 66 (3).

Accused liable for acts or neglect of managers, agents, etc.

(4) In a prosecution of an offence under any provision of this Act, any act or neglect on the part of any manager, agent, representative, officer, director or supervisor of the accused, whether a corporation or not, shall be the act or neglect of the accused. R.S.O. 1990, c. O.1, s. 66 (4).

Additional orders

(5) If a person is convicted of an offence under this section, the court may, in addition to any fine or imprisonment that is imposed, make any prescribed order. 2022, c. 7, Sched. 4, s. 2 (3).

Section Amendments with date in force (d/m/y)

2017, c. 34, Sched. 30, s. 4 (1, 2) - 14/12/2017

Certified copies of documents, etc., as evidence

67 (1) In any proceeding or prosecution under this Act,

- (a) a copy of an order or decision purporting to have been made under this Act or the regulations and purporting to have been signed by the Minister or an inspector;
- (b) a document purporting to be a copy of a notice, drawing, record or other document, or any extract therefrom given or made under this Act or the regulations and purporting to be certified by an inspector;
- (c) a document purporting to certify the result of a test or an analysis of a sample of air and setting forth the concentration or amount of a biological, chemical or physical agent in a workplace or part thereof and purporting to be certified by an inspector; or
- (d) a document purporting to certify the result of a test or an analysis of any equipment, machine, device, article, thing or substance and purporting to be certified by an inspector,

is evidence of the order, decision, writing or document, and the facts appearing in the order, decision, writing or document without proof of the signature or official character of the person appearing to have signed the order or the certificate and without further proof.

Service of orders and decisions

(2) In any proceeding or prosecution under this Act, a copy of an order or decision purporting to have been made under this Act or the regulations and purporting to have been signed by the Minister, a Director or an inspector may be served,

- (a) personally in the case of an individual or in case of a partnership upon a partner, and in the case of a corporation, upon the president, vice-president, secretary, treasurer or an officer or director, or upon the manager or person in charge of the workplace; or
- (b) by registered letter addressed to an individual or corporation mentioned in clause (a) at the last known place of business of the individual or corporation,

and the same shall be deemed to be good and sufficient service thereof.
R.S.O. 1990, c. O.1, s. 67.

Place of trial

68 (1) An information in respect of an offence under this Act may, at the election of the informant, be heard, tried and determined by the Ontario Court of Justice sitting in the county or district in which the accused is resident or carries on business although the subject-matter of the information did not arise in that county or district. R.S.O. 1990, c. O.1, s. 68 (1); 2001, c. 9, Sched. I, s. 3 (15).

Provincial judge required

(2) The Attorney General or an agent for the Attorney General may by notice to the clerk of the court having jurisdiction in respect of an offence under this Act require that a provincial judge preside over the proceeding. R.S.O. 1990, c. O.1, s. 68 (2).

Section Amendments with date in force (d/m/y)

2001, c. 9, Sched. I, s. 3 (15) - 29/06/2001

Publication re convictions

68.1 (1) If a person, including an individual, is convicted of an offence under this Act, a Director may publish or otherwise make available to the general public the name of the person, a description of the offence, the date of the conviction and the person's sentence. 2006, c. 19, Sched. M, s. 5.

Internet publication

(2) Authority to publish under subsection (1) includes authority to publish on the Internet. 2006, c. 19, Sched. M, s. 5.

Disclosure

(3) Any disclosure made under subsection (1) shall be deemed to be in compliance with clause 42 (1) (e) of the *Freedom of Information and Protection of Privacy Act*. 2006, c. 19, Sched. M, s. 5; 2006, c. 34, Sched. C, s. 25.

Section Amendments with date in force (d/m/y)

2006, c. 19, Sched. M, s. 5 - 22/06/2006; 2006 - , c. 34, Sched. C, s. 25 - 1/04/2007

Limitation on prosecutions

69 No prosecution under this Act or the regulations shall be instituted more than two years after the later of,

- (a) the occurrence of the last act or default upon which the prosecution is based; or
- (b) the day upon which an inspector becomes aware of the alleged offence. 2017, c. 34, Sched. 30, s. 5.

Section Amendments with date in force (d/m/y)

2017, c. 34, Sched. 30, s. 5 - 14/12/2017

PART X REGULATIONS

Regulations

70 (1) The Lieutenant Governor in Council may make such regulations as are advisable for the health or safety of persons in or about a workplace. R.S.O. 1990, c. O.1, s. 70 (1).

Idem

(2) Without limiting the generality of subsection (1), the Lieutenant Governor in Council may make regulations,

- 1. defining any word or expression used in this Act or the regulations that is not defined in this Act;
- 2. designating or defining any industry, workplace, employer or class of workplaces or employers for the purposes of this Act, a part of this Act, or the regulations or any provision thereof;
- 3. exempting any workplace, industry, activity, business, work, trade, occupation, profession, constructor, employer or any class thereof from the application of a regulation or any provision thereof;
- 4. limiting or restricting the application of a regulation or any provision thereof to any workplace, industry, activity, business, work, trade, occupation, profession, constructor, employer or any class thereof;
- 5. exempting an employer from the requirements of clause 37 (1) (a) or (b) with respect to a hazardous material;
- 6. respecting any matter or thing that is required or permitted to be regulated or prescribed under this Act;
- 7. respecting any matter or thing, where a provision of this Act requires that the matter or thing be done, used or carried out or provided as prescribed;
- 8. respecting any matter or thing, where it is a condition precedent that a regulation be made prescribing the matter or thing before

this Act or a provision of this Act has any effect;

9. providing for and prescribing fees and the payment or refund of fees;
10. prescribing classes of workplaces for which and circumstances under which a committee shall consist of more than four persons and in each case prescribing the number of persons;
11. prescribing employers or workplaces or classes thereof for the purposes of clause 9 (1) (b);
12. exempting any workplace, industry, activity, business, work, trade, occupation, profession, constructor or employer or any class thereof from the application of subsection 9 (2);
13. respecting the conditions for eligibility, qualifications, selection and term of committee members, including certified members, and the operation of the committee;
14. exempting any class of workplaces from the requirement set out in subsection 9 (12);
15. prescribing elements that any policy required under this Act must contain;
16. regulating or prohibiting the installation or use of any machine, device or thing or any class thereof;
17. requiring that any equipment, machine, device, article or thing used bear the seal of approval of an organization designated by the regulations to test and approve the equipment, machine, device, article or thing and designating organizations for such purposes;
18. prescribing classes of employers who shall establish and maintain a medical surveillance program in which workers may volunteer to participate;
19. governing medical surveillance programs;
20. respecting the reporting by physicians and others of workers affected by any biological, chemical or physical agents or combination thereof;
21. regulating or prohibiting atmospheric conditions to which any worker may be exposed in a workplace;
22. prescribing methods, standards or procedures for determining the amount, concentration or level of any atmospheric condition or any biological, chemical or physical agent or combination thereof

in a workplace;

23. prescribing any biological, chemical or physical agent or combination thereof as a designated substance;
24. prohibiting, regulating, restricting, limiting or controlling the handling of, exposure to, or the use and disposal of any designated substance;
25. adopting by reference, in whole or in part, with such changes as the Lieutenant Governor in Council considers necessary, any code or standard and requiring compliance with any code or standard that is so adopted;
26. adopting by reference any criteria or guide in relation to the exposure of a worker to any biological, chemical or physical agent or combination thereof;
27. enabling a Director by notice in writing to designate that any part of a project shall be an individual project for the purposes of this Act and the regulations and prescribing to whom notice shall be given;
28. permitting the Minister to approve laboratories for the purpose of carrying out and performing sampling, analyses, tests and examinations, and requiring that sampling, analyses, examinations and tests be carried out and performed by a laboratory approved by the Minister;
29. requiring and providing for the registration of employers of workers;
30. providing for the establishment, equipment, operation and maintenance of mine rescue stations, as the Minister may direct, and providing for the payment of the cost thereof and the recovery of such cost from the mining industry;
31. prescribing training programs that employers shall provide;
- 31.1 requiring that training programs provided by employers meet such requirements as may be prescribed;
32. increasing the number of certified members required on a committee;
33. prescribing restrictions, prohibitions or conditions with respect to workers or workplaces relating to the risks of workplace violence;
34. prescribing forms and notices and providing for their use;

35. prescribing building standards for industrial establishments;
36. prescribing by name or description any biological or chemical agent as a hazardous material and any physical agent as a hazardous physical agent;
37. prohibiting an employer from altering a label on a hazardous material in prescribed circumstances;
38. REPEALED: 2015, c. 27, Sched. 4, s. 7 (1).
39. requiring an employer to disclose to such persons as may be prescribed the source of toxicological data used by the employer to prepare a safety data sheet;
40. prescribing the format and contents of a safety data sheet;
41. prescribing by class of employer the intervals at which a health and safety representative or a committee member designated under subsection 9 (23) shall inspect all or part of a workplace;
42. establishing criteria for determining, for the purpose of section 51, whether a person is critically injured;
43. prescribing first aid requirements to be met and first aid services to be provided by employers and constructors;
- 43.1 governing the employer's obligations under section 25.2 respecting the provision and maintenance of naloxone kits and the training referred to in subsection 25.2 (3);
44. prescribing, for the purpose of clause 26(1)(i), medical examinations and tests that a worker is required to undergo to ensure that the worker's health will not affect his or her ability to perform his or her job in a manner that might endanger others;
45. prescribing classes of workplace with respect to which section 45 does not apply;
46. prescribing the qualifications of persons whom a certified member may designate under subsection 45 (9);
47. prescribing, for the purpose of subsection 46 (6), criteria for determining whether a constructor or employer has demonstrated a failure to protect the health and safety of workers;
48. prescribing matters to be considered by the Board in deciding upon an application under section 46;
49. prescribing classes of workplace with respect to which section 47 does not apply;

50. requiring an employer to designate a person in a workplace to act as a workplace co-ordinator with respect to workplace violence and workplace harassment, and prescribing the functions and duties of the co-ordinator;
51. in the case of a worker described in subsection 43 (2), specifying situations in which a circumstance described in clause 43 (3) (a), (b), (b.1) or (c) shall be considered, for the purposes of clause 43 (1) (a), to be inherent in the worker's work or a normal condition of employment;
52. varying or supplementing subsections 43 (4) to (13) with respect to the following workers, in circumstances when section 43 applies to them:
 - i. workers to whom section 43 applies by reason of a regulation made for the purposes of subsection 3 (3), and
 - ii. workers described in subsection 43 (2);
53. providing for such transitional matters as the Lieutenant Governor in Council considers necessary or advisable in connection with the implementation of section 22.5;
54. prescribing the functions of the Office of the Worker Adviser for the purposes of Part VI;
55. prescribing the functions of the Office of the Employer Adviser for the purposes of Part VI;
56. prescribing a number of employees for the purposes of subsection 50.1 (2). R.S.O. 1990, c. O.1, s. 70 (2); 1997, c. 16, s. 2 (16); 1998, c. 8, s. 59; 2001, c. 9, Sched. I, s. 3 (16); 2009, c. 23, s. 7; 2011, c. 11, s. 18 (2-4); 2015, c. 27, Sched. 4, s. 7.

Rolling incorporation by reference

(3) The power to adopt by reference and require compliance with a code or standard in paragraph 25 of subsection (2) and to adopt by reference any criteria or guide in relation to the exposure of a worker to any biological, chemical or physical agent or combination thereof in paragraph 26 of subsection (2) includes the power to adopt a code, standard, criteria or guide as it may be amended from time to time. 2020, c. 18, Sched. 13, s. 1.

Section Amendments with date in force (d/m/y)

1997, c. 16, s. 2 (16) - 1/01/1998; 1998, c. 8, s. 59 - 29/06/1998

2001, c. 9, Sched. I, s. 3 (16) - 29/06/2001

2009, c. 23, s. 7 - 15/06/2010

2011, c. 1, Sched. 7, s. 2 (12, 14) - no effect - see 2015, c. 27, Sched. 4, s. 11 - 03/12/2015; 2011, c. 11, s. 18 (1) - not in force; 2011, c. 11, s. 18 (2) - 01/06/2011; 2011, c. 11, s. 18 (3, 4) - 01/04/2012

2015, c. 27, Sched. 4, s. 7 - 01/07/2016

2020, c. 18, Sched. 13, s. 1 - 21/07/2020

Regulations, taxi industry

71 (1) The Lieutenant Governor in Council may make regulations governing the application of the duties and rights set out in Part III.0.1 to the taxi industry. 2009, c. 23, s. 8.

Same

(2) Without limiting the generality of subsection (1), the Lieutenant Governor in Council may make regulations,

- (a) specifying that all or any of the duties set out in Part III.0.1 apply for the purposes of the regulations, with such modifications as may be necessary in the circumstances;
- (b) specifying who shall be considered an employer for the purposes of the regulations and requiring that person to carry out the specified duties;
- (c) specifying who shall be considered a worker for the purposes of the regulations;
- (d) specifying what shall be considered a workplace for the purposes of the regulations. 2009, c. 23, s. 8.

Section Amendments with date in force (d/m/y)

2009, c. 23, s. 8 - 15/06/2010

Ontario Court of Justice

April 1, 2018

SCHEDULE 66.2

Occupational Health and Safety Act

Item	Offence	Section	Set Fine
1.	Employer failing to cause workers to select at least one health and safety representative	8 (1)	\$550
2.	Employer failing to cause joint health and safety committee to be established	9 (4)	\$550
3.	Employer failing to prepare written occupational health and safety policy	25 (2) (j)	\$550
4.	Employer failing to develop occupational health and safety program	25 (2) (j)	\$550
5.	Employer failing to maintain occupational health and safety program	25 (2) (j)	\$550
6.	Employer failing to prepare workplace violence policy	32.0.1 (1) (a)	\$550
7.	Employer failing to prepare workplace harassment policy	32.0.1 (1) (b)	\$550
8.	Employer failing to develop workplace violence program	32.0.2 (1)	\$550
9.	Employer failing to maintain workplace violence program	32.0.2 (1)	\$550
10.	Employer failing to assess risks of workplace violence	32.0.3 (1)	\$550
11.	Employer failing to reassess risks of workplace violence	32.0.3 (4)	\$550
12.	Employer failing to provide information and instruction on workplace violence policy	32.0.5 (2)	\$550
13.	Employer failing to provide information and instruction on workplace violence program	32.0.5 (2)	\$550
14.	Employer failing to develop written workplace harassment program	32.0.6 (1)	\$550
15.	Employer failing to maintain written workplace harassment program	32.0.6 (1)	\$550
16.	Employer failing to provide information and instruction on workplace harassment policy	32.0.8 (a)	\$550
17.	Employer failing to provide information and instruction on workplace harassment program	32.0.8 (a)	\$550

REGULATION 851 - INDUSTRIAL ESTABLISHMENT

R.R.O. 1990, REGULATION 851**INDUSTRIAL ESTABLISHMENTS**

Consolidation Period: From July 1, 2022 to the e-Laws currency date.

Last amendment: 374/22.

This is the English version of a bilingual regulation.

DEFINITIONS

1. In this Regulation,

“adequate”, when used in relation to a procedure, plan, material, device, object or thing, means that it is,

(a) sufficient for both its intended and its actual use, and

(b) sufficient to protect a worker from occupational illness or occupational injury; (“adéquat”)

“adequately” has a meaning that corresponds to the meaning of “adequate”; (“adéquatement”)

“boom” means the projecting part of a back-hoe, shovel, crane or similar lifting device from which a load is likely to be supported; (“flèche”)

“fire-resistance rating” means the rating in hours or fraction thereof that a material or assembly of materials will withstand the passage of flame and the transmission of heat when exposed to fire, as established for the material or assembly of materials under the *Building Code Act*; (“indice de résistance au feu”)

“flammable liquid” means a liquid having a flash point below 37.8° Celsius, and a vapour pressure below 275 kilopascals absolute at 37.8° Celsius; (“liquide inflammable”)

“foundry” means the part of a building or premises or the workshop, structure, room or place in which base metals or their alloys are cast in moulds, other than permanent moulds, or where core-making, shakeout or cleaning or any casting or other dust-causing operation ancillary to the casting process is carried on; (“fonderie”)

“gangway” means a defined passageway between a metal melting unit and a metal pouring area; (“passage”)

“lifting device” means a device that is used to raise or lower any material or object and includes its rails and other supports but does not include a device to which Ontario Regulation 209/01 (Elevating Devices), made

under the *Technical Standards and Safety Act*, 2000, applies; ("appareil de levage")

"log" includes tree-length pulpwood and a pit prop, pole, post, tie or any similar product; ("bille")

"pouring aisle" means a passageway leading from a gangway where metal is poured into a mould or box; ("allée de coulée")

"prime mover" means an initial source of motive power; ("élément moteur")

"service room" means, in relation to a building, a room that accommodates building services and includes a boiler room, furnace room, incinerator room, garbage room, elevator machine room and a room that accommodates air conditioning or heating appliances, pumps, compressors or electrical services; ("local technique")

"transmission equipment" means any object or objects by which the motion of a prime mover is transmitted to a machine that is capable of utilizing such motion and includes a shaft, pulley, belt, chain, gear, clutch or other device; ("organe de transmission")

"working space" means any space where persons are engaged in the performance of work within a foundry but does not include offices, lunch rooms, locker rooms, change rooms, rest rooms, washrooms, shower rooms, toilet rooms, pattern shops, maintenance shops, laboratories, shipping areas, the storage space occupied by equipment or materials not regularly in use or the enclosed space where core sands and moulding sands are stored. ("aire de travail") R.R.O. 1990, Reg. 851, s. 1; O. Reg. 516/92, s. 1; O. Reg. 629/05, s. 1; O. Reg. 420/10, s. 1; O. Reg. 60/18, s. 1.

ALTERNATIVE METHODS AND MATERIALS

2. An employer, owner or constructor may vary a procedure required by this Regulation or the composition, design, size or arrangement of a material, object, device or thing as required by this Regulation,

- (a) if the procedure, composition, design, size or arrangement as varied affords protection for the health and safety of workers that is at least equal to the protection that would otherwise be given; and
- (b) if the employer, owner or constructor gives written notice of the varied procedure, composition, design, size or arrangement to the joint health and safety committee or the health and safety representative, if any, for the workplace and to any trade union representing workers at the workplace. O. Reg. 186/19, s. 2.

APPLICATION

3. This Regulation applies to all industrial establishments. R.R.O. 1990, Reg. 851, s. 3.

**PART I
SAFETY REGULATIONS**

- 4.** (1) Subject to subsection (2), the minimum age of,
- (a) a worker; or
 - (b) a person who is permitted to be in or about an industrial establishment, shall be,
 - (c) sixteen years of age in a logging operation;
 - (d) fifteen years of age in a factory other than a logging operation; and
 - (e) fourteen years of age in a workplace other than a factory. R.R.O. 1990, Reg. 851, s. 4 (1).
- (2) Clause (1) (b) does not apply to a person who,
- (a) while in the industrial establishment, is accompanied by a person who has attained the age of majority;
 - (b) is being guided on a tour of the industrial establishment;
 - (c) is in an area of the industrial establishment used for sales purposes; or
 - (d) is in an area of the industrial establishment to which the public generally has access. R.R.O. 1990, Reg. 851, s. 4 (2).
- (3) Clauses (1) (d) and (e) do not apply with respect to a worker who works as a performer in the entertainment and advertising industry. O. Reg. 179/07, s. 1.
- (4) In subsection (3),
- "entertainment and advertising industry" means the industry of producing,
- (a) live or broadcast performances, or
 - (b) visual, audio or audio-visual recordings of performances, in any medium or format; ("industrie du spectacle et de la publicité")
- "performance" means a performance of any kind, including theatre, dance, ice skating, comedy, musical productions, variety, circus, concerts, opera, modelling and voice-overs, and "performer" has a

corresponding meaning. (“representation”) O. Reg. 179/07, s. 1.

5.-6. REVOKED: O. Reg. 421/21, s.1.

PRE-START HEALTH AND SAFETY REVIEWS

7. (1) In this section,

“apparatus” means equipment or a machine or device; (“appareil”)

“applicable provision” means an applicable provision of this Regulation that is listed in the Table; (“disposition applicable”)

“protective element” means a shield, a guard, an operating control acting as a guard, a locking device or any other device preventing access; (“élément protecteur”)

“spray booth” means a spray booth as defined in Ontario Regulation 213/07 (Fire Code) made under the *Fire Protection and Prevention Act, 1997*; (“cabine de pulvérisation”)

“Table” means the Table to this section. (“tableau”) O. Reg. 528/00, s. 2; O. Reg. 420/10, s. 3 (1).

(2) Subject to subsection (3), an owner, lessee or employer shall ensure that a pre-start health and safety review is conducted if, in a factory, an applicable provision applies and a corresponding circumstance described in the Table will exist,

- (a) because a new apparatus, structure or protective element is to be constructed, added or installed or a new process is to be used; or
- (b) because an existing apparatus, structure, protective element or process is to be modified and one of the following steps must be taken to obtain compliance with the applicable provision:
 - (i) New or modified engineering controls are used.
 - (ii) Other new or modified measures are used.
 - (iii) A combination of new, existing or modified engineering controls and other new or modified measures is used. O. Reg. 434/21, s. 1 (2).

(3) A pre-start health and safety review is not required,

- (a) at a logging operation; or
- (b) if an exemption set out in the Table applies. O. Reg. 434/21, s. 1 (2).

(4) A pre-start health and safety review shall be conducted by,

- (a) an engineer for item 1, 2, 3, 4, 5, 6 or 7 of the Table; and

- (b) an engineer or a person who in the opinion of the owner, lessee or employer possesses special, expert or professional knowledge or qualifications appropriate to assess any potential or actual hazards for item 8 of the Table. O. Reg. 434/21, s. 1 (2).
- (5) A report on the pre-start health and safety review shall,
 - (a) be made to the owner, lessee or employer;
 - (b) be signed and dated by the person conducting the review;
 - (c) have a seal affixed to it in accordance with the requirements under the *Professional Engineers Act*, if the person conducting the review is an engineer; and
 - (d) include the following information:
 - (i) details of the measures to be taken for compliance with the applicable provisions,
 - (ii) if item 3 or 7 of the Table applies, details of the structural adequacy of the apparatus or structure,
 - (iii) if any testing is to be performed before the apparatus, structure, protective element or process can be operated or used, as the case may be, details of the measures to be taken to protect the health and safety of workers while the testing is carried out, and
 - (iv) if the person conducting the review is not an engineer, the person's special, expert or professional knowledge or qualifications. O. Reg. 434/21, s. 1 (2).
- (6) If a pre-start health and safety review is required, the owner, lessee or employer shall ensure that the apparatus, structure, protective element or process is not operated or used, as the case may be, unless the review has been conducted and,
 - (a) all measures identified in the review as being required for compliance with the applicable provisions have been taken; or
 - (b) if some or all of the measures specified in clause (a) are not taken, the owner, lessee or employer has provided written notice to the joint health and safety committee or the health and safety representative, if any, of what measures have been taken to comply with the applicable provisions. O. Reg. 434/21, s. 1 (2).
- (7) If a pre-start health and safety review is required, the owner, lessee or employer shall provide a copy of the written report made under subsection (5) to the joint health and safety committee or the health and

safety representative, if any, before the apparatus, structure, protective element or process is operated or used, as the case may be. O. Reg. 434/21, s. 1 (2).

(8) The owner, lessee or employer shall keep the following documents readily accessible in the workplace for as long as the apparatus, structure or protective element remains in the workplace or the process is used in the workplace, as the case may be:

1. A copy of a written report made under subsection (5), together with supporting documentation, if any.
2. A copy of the documentation that establishes an exemption set out in the Table. O. Reg. 434/21, s. 1 (2).

(9) If an exemption set out in the Table applies, the owner, lessee or employer shall provide a copy of the documentation described in paragraph 2 of subsection (8) to the joint health and safety committee or the health and safety representative, if any, upon request. O. Reg. 434/21, s. 1 (2).

(10)-(15) REVOKED: O. Reg. 434/21, s.1 (2)

TABLE

Item	Circumstances	Applicable provisions of this Regulation	Exemptions
1.	Either of the following applies with respect to flammable liquids: 1. More than 235 litres of flammable liquids are located in a building or room. 2. Flammable liquids are dispensed in a building, room or area.	Subsections 22 (1), (2) and (4)	All of the following requirements are met: 1. No more than 235 litres of flammable liquids are stored per adequate cabinet. 2. No more than three cabinets containing flammable liquids are in a group of cabinets. 3. There is a minimum distance of 30 metres between groups of cabinets containing flammable liquids.
2.	Any of the following are used as protective elements in connection with an apparatus: 1. Safeguarding devices that signal the apparatus to stop, including but not limited to safety light curtains and screens, area scanning safeguarding systems, radio frequency systems and capacitance safeguarding systems, safety mat systems, two-hand control systems, two-hand tripping systems and single or multiple beam systems.	Sections 24, 25, 26, 28, 31 and 32	1. The protective element was installed at the time the apparatus was manufactured, and, i. the apparatus and the protective element were manufactured in accordance with, or have been modified to meet, current applicable standards; and ii. the apparatus has been installed in accordance with current applicable standards, if any, and the manufacturer's instructions.

2.	2. Barrier guards that use interlocking mechanical or electrical safeguarding devices.		2. The protective element was not installed at the time the apparatus was manufactured, and, i. the apparatus and the protective element were manufactured in accordance with, or have been modified to meet, current applicable standards; and ii. the apparatus and the protective element have been installed in accordance with current applicable standards, if any, and the manufacturer's instructions.
3.	Material, articles or things are placed or stored on a structure that is a rack or stacking structure.	Clause 45 (b)	The rack or stacking structure is designed and tested for use in accordance with current applicable standards.
4.	A process involves a risk of ignition or explosion that creates a condition of imminent hazard to a person's health or safety.	Section 63	The process is conducted inside a spray booth that has been manufactured and installed in accordance with current applicable standards.

5.	The use of a dust collector involves a risk of ignition or explosion that creates a condition of imminent hazard to a person's health or safety.	Section 65	None.
6.	A factory produces aluminum or steel or is a foundry that melts material or handles molten material.	Sections 87.3, 87.4, 87.5 and 88, subsections 90 (1), (2) and (3), and sections 91, 92, 94, 95, 96, 99, 101 and 102	None.
7.	Any of the following are used: 1. A travelling crane, overhead crane, monorail crane, gantry crane, jib crane or other lifting device suspended from or supported by a structure. 2. A vehicle lift or hoist.	Sections 51 and 53	1. The supporting structure was originally designed for the travelling crane, overhead crane, monorail crane, gantry crane, jib crane or other lifting device that is being installed or used. 2. The vehicle lift or hoist has been certified as meeting current applicable standards.

8.	A process uses or produces a hazardous biological or chemical agent and uses a ventilation system to limit the exposure of a worker in accordance with any exposure limit set out in Regulation 833 of the Revised Regulations of Ontario, 1990 (Control of Exposure to Biological or Chemical Agents) made under the Act.	Sections 127 and 128	A portable device that extracts smoke, fumes or other substances and that does not exhaust to the outdoors is used.

O. Reg. 434/21, s. 1 (3).

8. REVOKED: O. Reg. 450/97, s. 3.

FEES AND FORMS

9. The fee for each copy of a report or each copy of an order furnished under section 64 of the Act is \$500. R.R.O. 1990, Reg. 851, s. 9.

10. REVOKED: O. Reg. 60/18, s. 2.

PREMISES

11. A floor or other surface used by any worker shall,

(a) be kept free of,

(i) obstructions,

(ii) hazards, and

(iii) accumulations of refuse, snow or ice; and

(b) not have any finish or protective material used on it that is likely to make the surface slippery. R.R.O. 1990, Reg. 851, s. 11.

12. Clearances between a moving part of any machine or any material

carried by the moving part of the machine and any other machine, structure or thing shall be adequate to ensure that the safety of any worker in the area is not endangered. R.R.O. 1990, Reg. 851, s. 12.

13. (1) Subject to subsection (2), there shall be a guardrail,

- (a) around the perimeter of an uncovered opening in a floor, roof or other surface to which a worker has access;
- (b) at an open side of,
 - (i) a raised floor, mezzanine, balcony, gallery, landing, platform, walkway, stile, ramp or other surface, or
 - (ii) a vat, bin or tank, the top of which is less than 107 centimetres above the surrounding floor, ground, platform or other surface; and
- (c) around a machine, electrical installation, place or thing that is likely to endanger the safety of any worker. R.R.O. 1990, Reg. 851, s. 13 (1).

(2) Subsection (1) does not apply to,

- (a) a loading dock;
- (b) a roof to which access is required only for maintenance purposes;
- (c) a pit used for,
 - (i) work on an assembly line, or
 - (ii) maintenance of vehicles or similar equipment; and
- (d) a conveyor or similar system that transports a vehicle or vehicle part, and any raised platform used with the conveyor or similar system, if a guardrail would,
 - (i) obstruct the passage of the vehicle or vehicle part,
 - (ii) prevent a worker from performing work, or
 - (iii) pose a hazard to a worker. R.R.O. 1990, Reg. 851, s. 13 (2); O. Reg. 456/18, s. 1 (1).

(3) If there is no guardrail in a situation described in subsection (2), an employer shall develop and implement other measures and procedures to protect workers from the hazard of falling. O. Reg. 456/18, s. 1 (2).

14. (1) A guardrail shall,

- (a) have a top rail located not less than 91 and not more than 107

centimetres above the surface to be guarded;

- (b) have a mid rail;
- (c) if tools or other objects may fall on a worker, have a toe-board that extends from the surface to be guarded to a height of at least 125 millimetres; and
- (d) be free of splinters and protruding nails. R.R.O. 1990, Reg. 851, s. 14 (1).

(2) A guardrail shall be constructed to meet the structural requirements for guards as set out in the Building Code. R.R.O. 1990, Reg. 851, s. 14 (2).

15. A cover on an opening in a floor, roof or other surface shall be,

- (a) secured in place; and
- (b) constructed to meet the structural requirements for loads due to the use of floors and roofs as set out in the Building Code. R.R.O. 1990, Reg. 851, s. 15.

16. A door,

- (a) located or arranged so that it could be mistaken for an exit door; or
- (b) leading to a hazardous, restricted or unsafe area,

shall be identified by a warning sign posted on it. R.R.O. 1990, Reg. 851, s. 16.

17. A fixed walkway, service stair or stile shall be at least fifty-five centimetres in width. R.R.O. 1990, Reg. 851, s. 17.

18. (1) Subject to subsection (2), an access ladder fixed in position shall,

- (a) be vertical;
- (b) have rest platforms at not more than nine metre intervals;
- (c) be offset at each rest platform;
- (d) where the ladder extends over five metres, above grade, floor or landing, have a safety cage commencing not more than 2.2 metres above grade, floor or landing and continuing at least ninety centimetres above the top landing with openings to permit access by a worker to rest platforms or to the top landing;
- (e) have side rails that extend ninety centimetres above the landing; and
- (f) have rungs which are at least fifteen centimetres from the wall and

spaced at regular intervals. R.R.O. 1990, Reg. 851, s. 18 (1); O. Reg. 420/10, s. 4.

(2) Subsection (1) does not apply to an access ladder on a tower, water tank, chimney or similar structure which has a safety device which will provide protection should a worker using the ladder fall. R.R.O. 1990, Reg. 851, s. 18 (2).

19. Where frequent access is required to equipment elevated above or located below floor level, permanent platforms shall be provided with access by a fixed,

(a) stair; or

(b) access ladder. R.R.O. 1990, Reg. 851, s. 19.

20. Barriers, warning signs or other safeguards for the protection of all workers in an area shall be used where vehicle or pedestrian traffic may endanger the safety of any worker. R.R.O. 1990, Reg. 851, s. 20.

LIGHTING

21. Where natural lighting is inadequate to ensure the safety of any worker, artificial lighting shall be provided and shadows and glare shall be reduced to a minimum. R.R.O. 1990, Reg. 851, s. 21.

FIRE PREVENTION — PROTECTION

22. (1) Subject to subsections (2), (3) and (4), where not required for immediate use, flammable liquids shall be,

(a) in sealed containers; and

(b) located,

(i) outdoors and remote from any means of egress,

(ii) in a building not used for any other purpose, or

(iii) in a room,

(A) separated from the rest of the building with partitions having,

1. at least a one-hour fire-resistance rating, and

2. self-closing doors, hinged to swing outwardly on their vertical axes,

(B) equipped with,

1. a drain connected to a dry sump or holding tank,

and

2. liquid-tight seals between interior walls and floor and a liquid-tight ramped sill at any door opening, which is not in an exterior wall, and

(C) having natural ventilation to the outdoors by upper and lower exterior wall gravity louvres. R.R.O. 1990, Reg. 851, s. 22 (1); O. Reg. 420/10, s. 5.

(2) Where not required for immediate use, flammable liquids,

- (a) in opened containers; or
- (b) having a flash point below 22.8° Celsius and a boiling point below 37.8° Celsius, shall,
- (c) comply with the requirements of clause (1) (b);
- (d) be stored in facilities having no potential source of ignition; and
- (e) when located in a room, be located in a room equipped with,
 - (i) explosion venting to the outdoors, and
 - (ii) a spark resistant floor. R.R.O. 1990, Reg. 851, s. 22 (2).

(3) A maximum of 235 litres of flammable liquids may be stored,

- (a) in sealed containers of not more than twenty-three litre capacity each; or
- (b) in a metal cabinet of double walled construction with a 3-point door latch and a liquid-tight door sill raised at least fifty millimetres above the floor. R.R.O. 1990, Reg. 851, s. 22 (3).

(4) An area where flammable liquids are dispensed shall have,

- (a) mechanical ventilation from floor level to the outdoors at the rate of eighteen cubic metres per hour per square metre of floor area; and
- (b) containers and dispensing equipment bonded and grounded when flammable liquid is dispensed. R.R.O. 1990, Reg. 851, s. 22 (4).

23. A portable container used for dispensing flammable liquid in a work area shall be made of material suitable to provide for the safety of all workers and have,

- (a) a spring-loaded cap; and
- (b) a flame arrestor. R.R.O. 1990, Reg. 851, s. 23.

MACHINE GUARDING

24. Where a machine or prime mover or transmission equipment has an exposed moving part that may endanger the safety of any worker, the machine or prime mover or transmission equipment shall be equipped with and guarded by a guard or other device that prevents access to the moving part. R.R.O. 1990, Reg. 851, s. 24.

25. An in-running nip hazard or any part of a machine, device or thing that may endanger the safety of any worker shall be equipped with and guarded by a guard or other device that prevents access to the pinch point. R.R.O. 1990, Reg. 851, s. 25.

26. A machine shall be shielded or guarded so that the product, material being processed or waste stock will not endanger the safety of any worker. R.R.O. 1990, Reg. 851, s. 26.

27. An emergency stop control on a power-driven machine shall,

- (a) be conspicuously identified; and
- (b) be located within easy reach of the operator. R.R.O. 1990, Reg. 851, s. 27.

28. An operating control that acts as a guard for a machine not otherwise guarded shall,

- (a) be in a location where the safety of the operator is not endangered by moving machinery;
- (b) be arranged so that it cannot be operated accidentally; and
- (c) not be made ineffective by a tie-down device or other means. R.R.O. 1990, Reg. 851, s. 28.

29. A grinding wheel shall be,

- (a) marked with the maximum speed at which it may be used;
- (b) checked for defects before mounting;
- (c) mounted in accordance with the manufacturer's specifications;
- (d) operated at a speed which does not exceed the manufacturer's recommendations;
- (e) provided with protective hoods that enclose the wheel as closely as the work will permit;
- (f) operated only by workers protected by eye protection; and
- (g) stored where it will not be subjected to,

- (i) extreme heat or cold, or
- (ii) damage from impact. R.R.O. 1990, Reg. 851, s. 29.

30. A work rest for a grinding wheel shall,

- (a) have a maximum clearance of three millimetres from the grinding wheel;
- (b) be in a position above the centre line of the grinding wheel; and
- (c) not be adjusted while the grinding wheel is in motion. R.R.O. 1990, Reg. 851, s. 30.

31. A centrifugal extractor, separator or dryer shall have an interlocking device that will prevent,

- (a) any lid or covering guard from being opened or removed while the rotating drum or basket is in motion; and
- (b) the starting of the drum or basket while the lid or covering guard is open or removed. R.R.O. 1990, Reg. 851, s. 31.

32. A tumbling mill or tumbling dryer shall have a locking device which prevents any movement of the mill or dryer that may endanger any worker during loading or unloading. R.R.O. 1990, Reg. 851, s. 32.

33. Portions of conveyors or other moving machinery that are not visible from the control station, and where starting up may endanger any worker, shall be equipped with automatic start-up warning devices. R.R.O. 1990, Reg. 851, s. 33.

34. Guards shall be provided beneath conveyors,

- (a) that pass over any worker; or
- (b) from which falling material, including broken conveyor parts, may be a hazard to any worker. R.R.O. 1990, Reg. 851, s. 34.

35. Overhead protection shall be provided where falling material may endanger any worker. R.R.O. 1990, Reg. 851, s. 35.

36. (1) Subject to subsection (2), an explosive actuated fastening tool shall,

- (a) have a firing mechanism that will prevent the tool from being fired,
 - (i) while being loaded,
 - (ii) during preparation for firing, or
 - (iii) if dropped;

- (b) be capable of being operated only when the muzzle end is held against a working surface with a force of at least twenty-two newtons greater than the weight of the tool;
- (c) if required to be dismantled into separate parts for loading, be capable of being operated only when the separate parts are firmly locked together;
- (d) be capable of being fired only after two separate and distinct actions have been carried out by the operator, with the firing movement separate from the operation of bringing the tool into the firing position;
- (e) be used only when equipped with a protective guard or shield,
 - (i) suitable for the particular fastening operation being performed,
 - (ii) mounted at right angles to the barrel,
 - (iii) at least seventy-five millimetres in diameter, and
 - (iv) placed in a central position on the muzzle end of the tool except where the fastener is intended to be driven into a surface at a point within thirty-eight millimetres of another surface that is at an angle to the surface into which the fastener is intended to be driven;
- (f) be capable of being operated when the guard prescribed by clause (e) is placed in the central position only when the bearing surface of the guard is tilted not more than eight degrees from the working surface;
- (g) when not in use, be stored in a locked container;
- (h) not be left unattended where it may be available to a person other than a worker having the qualifications set out in subclause (k) (i);
- (i) whether loaded or unloaded, not be pointed directly at any person;
- (j) not be loaded unless it is being prepared for immediate use;
- (k) be used only,
 - (i) by a worker who has been instructed in the proper and safe manner of its use by the manufacturer or the manufacturer's authorized and qualified agent,
 - (ii) by a worker wearing both head protection and eye protection,
 - (iii) after it has been inspected by the worker referred to in

subclause (i) to ensure that,

- (A) the tool is clean,
- (B) all moving parts operate freely,
- (C) the barrel is free from any obstruction,
- (D) the tool is adequately equipped for the intended use, and
- (E) it is not defective,

(iv) in accordance with the instructions of the manufacturer,

(v) with an explosive load of a strength adequate to perform the intended work without excessive force, and

(vi) to drive a stud or other fastener suitable for insertion in the tool; and

(l) not be used in an atmosphere containing flammable vapours, gases or dusts. R.R.O. 1990, Reg. 851, s. 36 (1).

(2) Clauses (1) (e) and (f) do not apply to an explosive actuated fastening tool if the velocity of the stud or other fastener does not exceed ninety metres per second measured at a distance of two metres from the muzzle end of the tool when propelled by the maximum commercially available explosive load that the tool is chambered to accept. R.R.O. 1990, Reg. 851, s. 36 (2).

(3) A misfired cartridge that has been removed from an explosive actuated fastening tool shall be placed in a water filled container until the cartridge may be properly disposed of after its safe removal from the industrial establishment. R.R.O. 1990, Reg. 851, s. 36 (3).

37. An explosive load for an explosive actuated fastening tool shall,

- (a) be so marked or labelled that the operator can readily identify its strength;
- (b) not be stored in a container where an explosive load of a different strength is stored;
- (c) not be left unattended where it may be available to a person other than a worker having the qualifications set out in subclause 36 (1) (k) (i); and
- (d) when not in use, be stored in a locked container. R.R.O. 1990, Reg. 851, s. 37.

38. A hand-held nailing gun or similar tool shall be,

- (a) capable of being operated only when in contact with the work surface; and
- (b) operated only,
 - (i) by a competent person, and
 - (ii) when the operator is wearing eye protection. R.R.O. 1990, Reg. 851, s. 38.

39. A chain saw shall,

- (a) have,
 - (i) a chain that minimizes the possibility of a kickback, and
 - (ii) a device which will effectively stop the chain in the event of a kickback;
- (b) be in safe operating condition;
- (c) when being started, be held firmly;
- (d) when being used, be held firmly by both hands; and
- (e) have the chain stopped when not actually cutting. R.R.O. 1990, Reg. 851, s. 39.

40. Electrical equipment, insulating materials and conductors shall be,

- (a) suitable for their use; and
- (b) certified by,
 - (i) the Canadian Standards Association, or
 - (ii) the Electrical Safety Authority, as defined in the *Electricity Act, 1998*. R.R.O. 1990, Reg. 851, s. 40; O. Reg. 144/99, s. 2; O. Reg. 420/10, s. 6.

41. The entrance to a room or similar enclosure containing exposed live electrical parts shall have a conspicuous sign, warning of the danger, and forbidding entry by unauthorized persons. R.R.O. 1990, Reg. 851, s. 41.

42. (1) The power supply to electrical installations, equipment or conductors shall be disconnected, locked out of service and tagged before any work is done, and while it is being done, on or near live exposed parts of the installations, equipment or conductors. O. Reg. 630/94, s. 1.

(2) Before beginning the work, each worker shall determine if the requirements of subsection (1) have been complied with. O. Reg. 630/94,

s. 1.

(3) Locking out is not required,

- (a) if the conductors are adequately grounded with a visible grounding mechanism; or
- (b) if the voltage is less than 300 volts and there is no locking device for the circuit breakers or fuses and procedures are in place adequate to ensure that the circuit is not inadvertently energized. O. Reg. 630/94, s. 1.

(4) If locking out is not required for the reason set out in clause (3) (b), the employer shall ensure that the procedures required by that clause are carried out. O. Reg. 630/94, s. 1.

(5) If more than one worker is involved in the work referred to in subsection (1), the worker who disconnected and locked out the power supply shall communicate the purpose and status of the disconnecting and locking out. O. Reg. 630/94, s. 1.

(6) If a tag is used as a means of communication, the tag,

- (a) shall be made of non-conducting material;
- (b) shall be secured to prevent its inadvertent removal;
- (c) shall be placed in a conspicuous location;
- (d) shall state the reason the switch is disconnected and locked out;
- (e) shall show the name of the worker who disconnected and locked out the switch; and
- (f) shall show the date on which the switch was disconnected and locked out. O. Reg. 630/94, s. 1.

(7) The employer shall establish and implement written procedures for compliance with this section. O. Reg. 630/94, s. 1.

42.1 (1) This section applies and section 42 does not apply if it is not practical to disconnect electrical installations, equipment or conductors from the power supply before working on, or near, live exposed parts of the installations, equipment or conductors. O. Reg. 630/94, s. 1.

(2) The worker shall use rubber gloves, mats, shields and other protective equipment and procedures adequate to ensure protection from electrical shock and burns while performing the work. O. Reg. 630/94, s. 1.

(3) If the installation, equipment or conductor is operating at a nominal voltage of 300 volts or more, a suitably equipped competent person who

is able to recognize the hazards and perform rescue operations, including artificial respiration, shall be available and able to see the worker who is performing the work. O. Reg. 630/94, s. 1.

(4) Subsection (3) does not apply to equipment testing and troubleshooting operations. O. Reg. 630/94, s. 1.

42.2 Work performed on electrical transmission systems or outdoor distribution systems rated at more than 750 volts shall be performed in accordance with the document entitled “Electrical Utility Safety Rules”, published by the Infrastructure Health and Safety Association and revised in 2019. O. Reg. 60/18, s. 3; O. Reg. 186/19, s. 3.

43. Tools and other equipment that are capable of conducting electricity and endangering the safety of any worker shall not be used in such proximity to any live electrical installation or equipment that they might make electrical contact with the live conductor. R.R.O. 1990, Reg. 851, s. 43.

44. (1) Cord-connected electrical equipment and tools shall have a casing that is adequately grounded. O. Reg. 630/94, s. 2.

(2) Subsection (1) does not apply to cord-connected electrical equipment or tools that are adequately double-insulated and whose insulated casing shows no evidence of cracks or defects. O. Reg. 630/94, s. 2.

(3) Subsection (1) does not apply to a portable electrical generator in which the electrical equipment or tools are not exposed to an external electric power source if the casing of portable electrical equipment or tools connected to the generator is bonded to a non-current-carrying part of the generator. O. Reg. 420/10, s. 7.

44.1 When used outdoors or in wet locations, portable electrical tools shall be protected by a ground fault circuit interrupter installed at the receptacle or on the circuit at the panel. O. Reg. 630/94, s. 2.

44.2 A ground fault that may pose a hazard shall be investigated and removed without delay. O. Reg. 630/94, s. 2.

MATERIAL HANDLING

45. Material, articles or things,

- (a) required to be lifted, carried or moved, shall be lifted, carried or moved in such a way and with such precautions and safeguards, including protective clothing, guards or other precautions as will ensure that the lifting, carrying or moving of the material, articles or things does not endanger the safety of any worker;

- (b) shall be transported, placed or stored so that the material, articles or things,
 - (i) will not tip, collapse or fall, and
 - (ii) can be removed or withdrawn without endangering the safety of any worker; and
- (c) to be removed from a storage area, pile or rack, shall be removed in a manner that will not endanger the safety of any worker. R.R.O. 1990, Reg. 851, s. 45.

46. Machinery, equipment or material that may tip or fall and endanger any worker shall be secured against tipping or falling. R.R.O. 1990, Reg. 851, s. 46.

47. Cylindrical objects stored on their side shall be piled symmetrically with each unit in the bottom row chocked or wedged to prevent motion. R.R.O. 1990, Reg. 851, s. 47.

48. Barrels, drums or kegs that are piled on their ends shall have two parallel planks placed on top of each row before another row is added. R.R.O. 1990, Reg. 851, s. 48.

49. A storage cylinder for compressed gas shall,

- (a) have a valve connection that prevents an inadvertent connection which would result in a hazardous mixture of gases;
- (b) be secured in position during transportation, storage or use;
- (c) have the valve protection cap in position when the cylinder is not in use;
- (d) when containing acetylene, be in an upright position; and
- (e) be protected from physical damage. R.R.O. 1990, Reg. 851, s. 49.

50. A silo, bin, hopper, structure, container or thing that is not a confined space as defined in Ontario Regulation 632/05 (Confined Spaces) made under the Act and that is used for storing or containing bulk material may be entered only where,

- (a) the supply of material thereto is stopped and precautions are taken that will prevent any further supply;
- (b) the worker entering is wearing a safety harness or other similar equipment attached to a rope or lifeline such that the worker shall not be endangered by any collapse or shifting of material in the silo, bin, hopper, structure, container or thing; and
- (c) at least one other worker equipped with a suitable alarm and

capable of rendering any necessary assistance is keeping watch nearby. R.R.O. 1990, Reg. 851, s. 50; O. Reg. 629/05, s. 3; O. Reg. 98/11, s. 1.

51. (1) A lifting device shall,

- (a) be so constructed, of such strength and be equipped with suitable ropes, chains, slings and other fittings so as to adequately ensure the safety of all workers;
- (b) be thoroughly examined by a competent person to determine its capability of handling the maximum load as rated,
 - (i) prior to being used for the first time, and
 - (ii) thereafter as often as necessary but not less frequently than recommended by the manufacturer and in any case, at least once a year,

and a permanent record shall be kept, signed by the competent person doing the examination;

- (c) be plainly marked with sufficient information so as to enable the operator of the device to determine the maximum rated load that the device is capable of lifting under any operating condition;
- (d) have a cab, screen, canopy guard or other adequate protection for the operator where the operator may be exposed to the hazard of falling material; and
- (e) when it is a pneumatic or hydraulic hoist, have controls that automatically return to their neutral position when released. R.R.O. 1990, Reg. 851, s. 51 (1); O. Reg. 420/10, s. 8 (1).

(2) A lifting device shall be operated,

- (a) only by,
 - (i) a competent person, or
 - (ii) a worker being instructed who is accompanied by a competent person; and
- (b) in such a way that,
 - (i) no part of the load passes over any worker,
 - (ii) where a worker may be endangered by the rotation or uncontrolled motion of a load, one or more guide ropes is used to prevent rotation or other uncontrolled motion, and
 - (iii) subject to subsection (3), when its load is in a raised position

the controls are attended by an operator. R.R.O. 1990, Reg. 851, s. 51 (2).

- (3) Subclause (2) (b) (iii) does not apply to,
 - (a) a hydraulic hoist that supports the load from below and is fixed in one location; and
 - (b) an assembly line hoist temporarily unattended during a stoppage of the assembly line. R.R.O. 1990, Reg. 851, s. 51 (3).
- (4) Hoisting controls operated from other than a cab or cage shall,
 - (a) be located so that they can be operated at a safe distance from a load being lifted; and
 - (b) automatically return to their neutral position when released. R.R.O. 1990, Reg. 851, s. 51 (4).
- (5) Where a lifting device is equipped with one or more limit switches,
 - (a) each limit switch shall automatically cut off the power and apply the brake when the limit is reached; and
 - (b) no limit switch shall be used as an operating control unless,
 - (i) the limit switch is designed for such use, and
 - (ii) the lifting device has a second limit switch in addition to the control limit switch. O. Reg. 420/10, s. 8 (2).

52. A crane, lift truck or similar equipment shall be used to support, raise or lower a worker only when,

- (a) the worker is on a platform,
 - (i) equipped with adequate safety devices that will automatically prevent the platform and load from falling if the platform's normal support fails,
 - (ii) suspended from a boom that does not move, and the person is attached to a separate lifeline suspended from the boom or a fixed support capable of supporting at least four times the weight of the worker, or
 - (iii) attached to a mast or boom which,
 - (A) is hydraulically or pneumatically operated, and
 - (B) is equipped with a safety device that will prevent free fall of the platform in the event of a pressure line failure;
- (b) where the equipment is not designed for the specific purpose

of hoisting personnel, the load applied to the crane, lift truck or similar equipment is less than one half the maximum rated load;

- (c) the platform has a sign indicating the load that may be applied to the crane, lift truck or similar equipment under clause (b);
- (d) where controls are provided at more than one location,
 - (i) each control station is provided with means whereby the operator can shut off power to the equipment, and
 - (ii) interlocks have been provided so that only one station can be operative at any time; and
- (e) except when the controls are operated from the platform, the controls are attended and operated by another worker. R.R.O. 1990, Reg. 851, s. 52; O. Reg. 420/10, s. 9.

53. Where a travelling crane is operated on a crane runway, there shall be,

- (a) rail stops or bumpers extending at least as high as the centre of the wheels at both ends of the crane runway; and
- (b) where applicable, similar rail stops at the ends of the crane bridge. R.R.O. 1990, Reg. 851, s. 53.

54. (1) Mobile equipment shall,

- (a) when lighting conditions are such that its operation may be hazardous, have head lights and tail lights that provide adequate illumination;
- (b) when exposed to the hazard of falling material, have a screen or canopy guard adequate to protect the operator;
- (c) be used to transport a person, other than the operator, only when that worker is seated in a permanently installed seat; and
- (d) subject to subsection (2), be operated only by a competent person.

(2) Clause (1) (d) does not apply to mobile equipment operated by a worker while the worker is being instructed and accompanied by a competent person. R.R.O. 1990, Reg. 851, s. 54.

55. A vehicle used to transport structural steel, logs or similar loads shall have a bulkhead between the operator's cab and the load that is reasonably capable of resisting any impact caused by the shifting of the load under emergency stop conditions. R.R.O. 1990, Reg. 851, s. 55.

56. Where the operator of a vehicle, mobile equipment, crane or similar

material handling equipment does not have a full view of the intended path of travel of the vehicle, mobile equipment, crane or similar material handling equipment or its load, the vehicle, mobile equipment, crane or similar material handling equipment shall only be operated as directed by a signaller who is a competent person and who is stationed,

- (a) in full view of the operator;
- (b) with a full view of the intended path of travel of the vehicle, mobile equipment, crane or similar material handling equipment and its load; and
- (c) clear of the intended path of travel of the vehicle, mobile equipment, crane or similar material handling equipment and its load. R.R.O. 1990, Reg. 851, s. 56.

57. A vehicle left unattended shall be immobilized and secured against accidental movement. R.R.O. 1990, Reg. 851, s. 57.

58. Powered equipment shall not be left unattended unless forks, buckets, blades and similar parts are in the lowered position or solidly supported. R.R.O. 1990, Reg. 851, s. 58.

59. Except for the purpose of a test of the material handling equipment, no material handling equipment shall be loaded in excess of its maximum rated load. R.R.O. 1990, Reg. 851, s. 59.

60. (1) Except as prescribed by section 42.2, where a vehicle, crane or similar equipment is operated near a live power line carrying electricity at more than 750 volts, every part of the equipment shall be kept at least the minimum distance from the live power line set out in Column 2 of the Table for the particular voltage set out opposite thereto in Column 1 of the Table:

TABLE

Minimum distance from live power lines for electricity	
Column 1	Column 2
Voltage of live power line	Minimum Distance
750 to 150,000 volts	3 metres
150,001 to 250,000 volts	4.5 metres
250,001 volts and over	6 metres

R.R.O. 1990, Reg. 851, s. 60 (1); O. Reg. 630/94, s. 3 (1).

(2) Subject to section 42.2, where a vehicle, crane or similar equipment is operated near a live power line, and it is possible for any part of the vehicle, crane or similar equipment or its load to make contact with the live power line,

- (a) a worker shall be stationed within the view of the operator to warn the operator when any part of the equipment is approaching the minimum distance from the live power line; and
- (b) clearance shall be allowed for any change in boom angle and for any swing of the hoisting cable and load. R.R.O. 1990, Reg. 851, s. 60 (2); O. Reg. 630/94, s. 3 (2).

61. Gasoline engines on mobile or portable equipment shall be refuelled,

- (a) outdoors;
- (b) with the engine on the equipment stopped;
- (c) with no source of ignition, within three metres of the dispensing point; and
- (d) with an allowance made for expansion of the fuel should the equipment be exposed to a higher ambient temperature. R.R.O. 1990, Reg. 851, s. 61.

62. (1) Subject to subsection (2), a piping system containing a substance which, because of its toxicity, temperature, pressure, flammability or other property, is hazardous, shall have its contents and direction of flow positively identified,

- (a) at valves and fittings;
- (b) where a pipe passes through a wall or floor; and
- (c) where circumstances may make such contents or direction of flow doubtful. R.R.O. 1990, Reg. 851, s. 62 (1); O. Reg. 420/10, s. 10.

(2) Subsection (1) does not apply to a piping system in a petro-chemical plant where processing and maintenance are carried out by a competent person under controlled conditions so as to provide for the protection of all workers. R.R.O. 1990, Reg. 851, s. 62 (2).

63. A process that is likely to produce a gas, vapour, dust or fume, to such an extent as to be capable of forming an explosive mixture with air shall be carried out in an area which has provision for safe disposal by burning under controlled conditions or in an area which,

- (a) is isolated from other operations;
- (b) has a system of ventilation adequate to ensure that the gas, vapour, dust or fume does not reach a hazardous concentration;
- (c) has no potential sources of ignition;

- (d) has provision for explosion venting; and
- (e) has, where applicable, baffles, chokes or dampers to reduce the effects of any explosion. R.R.O. 1990, Reg. 851, s. 63.

64. Where the hazard of a dust explosion may be created by the entry of foreign particles into equipment, the equipment shall have separators which prevent such entry. R.R.O. 1990, Reg. 851, s. 64.

65. (1) Subject to subsection (2), a collector that collects aluminum, magnesium or other fine dust of an easily ignitable nature shall be located,

- (a) outdoors; or
- (b) in a room used solely for the housing of dust-collecting equipment which is,
 - (i) separated from the rest of the building by a dust-tight partition having a minimum fire-resistance rating of one hour, and
 - (ii) constructed to provide explosion venting to the outdoors.

(2) Subsection (1) does not apply to a collector,

- (a) that uses an inert liquid as a medium to collect dust;
- (b) that is used for a wood-working operation other than wood flour manufacturing and having less than 0.47 cubic metres per second capacity;
- (c) that will safely contain explosions; or
- (d) that will resist explosions and is equipped with effective explosion venting to the outdoors. R.R.O. 1990, Reg. 851, s. 65.

66. A compressed air or other compressed gas blowing device shall not be used for blowing dust or other substances,

- (a) from clothing worn by a worker except where the device limits increase in pressure when the nozzle is blocked; or
- (b) in such a manner as to endanger the safety of any worker. R.R.O. 1990, Reg. 851, s. 66.

67.-71. REVOKED: O. Reg. 629/05, s. 4.

MAINTENANCE AND REPAIRS

72. (1) Where a structure is damaged to the extent that a collapse of the structure or any part of the structure is likely to occur and cause injury to a worker,

- (a) the structure shall be braced and shored to prevent the collapse of

the structure; or

- (b) effective safeguards shall be provided to prevent access to the area. R.R.O. 1990, Reg. 851, s. 72 (1).

(2) The bracing and shoring or other safeguards prescribed by subsection (1) shall be installed progressively to ensure that a worker installing the bracing and shoring or other safeguards is not in danger. R.R.O. 1990, Reg. 851, s. 72 (2).

73. A portable ladder shall,

- (a) be free from broken or loose members or other faults;
- (b) have non-slip feet;
- (c) be placed on a firm footing;
- (d) where it,
 - (i) exceeds six metres in length and is not securely fastened, or
 - (ii) is likely to be endangered by traffic,

be held in place by one or more workers while being used; and

- (e) when not securely fastened, be inclined so that the horizontal distance from the top support to the foot of the ladder is not less than $\frac{1}{4}$ and not more than $\frac{1}{3}$ of the length of the ladder. R.R.O. 1990, Reg. 851, s. 73.

74. Machinery, equipment or material that is temporarily elevated and under which a worker may pass or work shall be securely and solidly blocked to prevent the machinery, equipment or material from falling or moving. R.R.O. 1990, Reg. 851, s. 74.

75. A part of a machine, transmission machinery, device or thing shall be cleaned, oiled, adjusted, repaired or have maintenance work performed on it only when,

- (a) motion that may endanger a worker has stopped; and
- (b) any part that has been stopped and that may subsequently move and endanger a worker has been blocked to prevent its movement. R.R.O. 1990, Reg. 851, s. 75.

76. Where the starting of a machine, transmission machinery, device or thing may endanger the safety of a worker,

- (a) control switches or other control mechanisms shall be locked out; and

- (b) other effective precautions necessary to prevent any starting shall be taken. R.R.O. 1990, Reg. 851, s. 76; O. Reg. 230/95, s. 1.

77. Safety chains, cages or other protection against blown-off side or lock rings shall be used when inflating a tire mounted on a rim. R.R.O. 1990, Reg. 851, s. 77.

78. (1) Subject to subsection (2), where repairs or alterations are to be made on a drum, tank, pipeline or other container, the drum, tank, pipeline or other container shall,

- (a) have internal pressures adjusted to atmospheric pressure before any fastening is removed;
- (b) be drained and cleaned or otherwise rendered free from any explosive, flammable or harmful substance; and
- (c) not be refilled while there is any risk of vaporising or igniting the substance that is being placed in the drum, tank, pipeline or other container. R.R.O. 1990, Reg. 851, s. 78 (1); O. Reg. 420/10, s. 11.

(2) Clauses (1) (a) and (b) do not apply to a pipeline where hot-tapping and boxing-in are carried out by a competent person under controlled conditions so as to provide for the protection of all workers. R.R.O. 1990, Reg. 851, s. 78 (2).

PROTECTIVE EQUIPMENT

79. A worker required to wear or use any protective clothing, equipment or device shall be instructed and trained in its care and use before wearing or using the protective clothing, equipment or device. R.R.O. 1990, Reg. 851, s. 79; O. Reg. 420/10, s. 12.

80. A worker exposed to the hazard of head injury shall wear head protection appropriate in the circumstances. R.R.O. 1990, Reg. 851, s. 80.

81. A worker exposed to the hazard of eye injury shall wear eye protection appropriate in the circumstances. R.R.O. 1990, Reg. 851, s. 81; O. Reg. 420/10, s. 13.

82. A worker exposed to the hazard of foot injury shall wear foot protection appropriate in the circumstances. R.R.O. 1990, Reg. 851, s. 82.

83. (1) Long hair shall be suitably confined to prevent entanglement with any rotating shaft, spindle, gear, belt or other source of entanglement.

(2) Jewellery or clothing that is loose or dangling or rings shall not be worn near any rotating shaft, spindle, gear, belt or other source of entanglement. R.R.O. 1990, Reg. 851, s. 83.

84. A worker exposed to the hazard of injury from contact of the

worker's skin with,

- (a) a noxious gas, liquid, fume or dust;
- (b) a sharp or jagged object which may puncture, cut or abrade the worker's skin;
- (c) a hot object, hot liquid or molten metal; or
- (d) radiant heat, shall be protected by,
- (e) wearing apparel sufficient to protect the worker from injury; or
- (f) a shield, screen or similar barrier,

appropriate in the circumstances. R.R.O. 1990, Reg. 851, s. 84.

85. Where a worker is exposed to the hazard of falling and the surface to which he or she might fall is more than three metres below the position where he or she is situated,

- (a) the worker shall wear a serviceable safety belt or harness and lifeline that is adequately secured to a fixed support and so arranged that the worker cannot fall freely for a vertical distance of more than 1.5 metres; and
 - (b) the fall arrest system described in clause (a) shall,
 - (i) have sufficient capacity to absorb twice the energy and twice the load that under the circumstances of its use may be transmitted to it, and
 - (ii) be equipped with a shock absorber or other devices to limit the maximum arresting force to 8.0 kilonewtons to the worker.
- R.R.O. 1990, Reg. 851, s. 85; O. Reg. 420/10, s. 14.

86. Where a worker is exposed to the hazard of falling into liquid that is of sufficient depth for a life jacket or other personal flotation device to be effective as protection from the risk of drowning, there shall be an alarm system and rescue equipment, appropriate in the circumstances, to ensure the worker's rescue from the liquid and,

- (a) the worker shall wear a life jacket or other personal flotation device that is appropriate in the circumstances; or
- (b) the employer shall develop and implement written measures and procedures to prevent the worker from drowning. O. Reg. 186/19, s. 4.

MOLTEN MATERIAL

87. Sections 87.1 to 87.6 apply to foundries. O. Reg. 230/95, s. 2.

87.1 An employer who is required to develop and implement measures and procedures under sections 87.2 to 87.6 shall consult with the committee or health and safety representative, if any, in the development of the measures and procedures. O. Reg. 230/95, s. 2.

87.2 (1) Every employer shall develop and implement measures and procedures to prevent molten material from coming into contact with damp, rusty or cold surfaces, moisture or water, or other substances, if the contact might endanger the health or safety of workers.

(2) A worker shall work in compliance with the measures and procedures developed under subsection (1).

(3) The employer shall ensure that a device used to contain molten material is,

- (a) examined immediately before each use; and
- (b) not used if found to be defective or contaminated by a substance that, on contact with molten material, might endanger the health or safety of workers. O. Reg. 230/95, s. 2.

87.3 (1) In this section,

“spillage” refers to the spillage of molten material that could endanger the health or safety of workers. O. Reg. 230/95, s. 2.

(2) The employer shall use engineering controls, to the fullest extent that is reasonably possible in the circumstances, to prevent spillage. O. Reg. 230/95, s. 2.

(3) If spillage cannot be prevented by the use of engineering controls alone, the employer shall also develop and implement other measures and procedures to be used in combination with the engineering controls to prevent spillage. O. Reg. 230/95, s. 2.

(4) If the use of engineering controls is not reasonably possible in the circumstances, the employer shall develop and implement other measures and procedures to prevent spillage. O. Reg. 230/95, s. 2.

(5) The measures and procedures referred to in subsections (3) and (4) may include the use of personal protective equipment and the exclusion of workers from locations where they might be exposed to spillage. O. Reg. 230/95, s. 2.

87.4 The employer shall provide adequate means of egress from all locations where workers may be exposed to molten material. O. Reg.

230/95, s. 2.

87.5 (1) Subsections (2) to (4) apply to a location if the following conditions are met:

1. The location is a runout, pouring or moulding pit or other working space that is,
 - i. more than 60 centimetres below the adjacent floor level, or
 - ii. surrounded by a wall that is more than 60 centimetres high and that a person must pass over to leave the working space.
2. The location was constructed or altered after May 1, 1995.
3. Workers may be exposed to molten material at the location.
O. Reg. 230/95, s. 2.

(2) Egress shall be provided by means of doorways, ramps or stairs of non-combustible material. O. Reg. 230/95, s. 2.

(3) Egress ramps and stairs shall be made of slip-resistant material. O. Reg. 230/95, s. 2.

(4) If the location is more than 15 square metres in area, or if any point within the location is more than 5 metres from an egress doorway, ramp or stair,

- (a) at least two doorways, ramps or stairs shall be provided, situated at a distance from each other that is at least three-quarters of the greatest diagonal dimension of the location, measured on the horizontal plane; and
- (b) a doorway, ramp or stair shall be provided within 25 metres of any point within the location. O. Reg. 230/95, s. 2.

87.6 The employer shall develop and implement measures and procedures for communicating to workers the existence of emergency situations relating to molten material. O. Reg. 230/95, s. 2.

88. (1) A clear space adequate for safe operating and maintenance purposes shall be provided between the outer shell of any cupola or other melting unit and any wall, structure, equipment or operation. R.R.O. 1990, Reg. 851, s. 88 (1).

(2) Subject to subsection (5), the width of any passageway or aisle adjacent to a melting unit shall not be less than 1.2 metres. R.R.O. 1990, Reg. 851, s. 88 (2).

(3) The firing portion and fuel supply controls of each melting unit shall be accessible from an aisle or be in a location remote from a melting unit.

R.R.O. 1990, Reg. 851, s. 88 (3).

(4) Subject to subsection (5), the dimensions of the working space at any melting unit shall not be less than 1.8 metres measured horizontally from the furnace shell or pouring spout or such additional clearance as is required for safe working. R.R.O. 1990, Reg. 851, s. 88 (4).

(5) Subsections (2) and (4) do not apply to a melting unit installed before the 31st day of July, 1964. R.R.O. 1990, Reg. 851, s. 88 (5).

89. Permanent gangways shall be clearly marked. R.R.O. 1990, Reg. 851, s. 89.

90. (1) Subject to subsections (2) and (3), where molten metal is conveyed, the minimum width of a gangway for one-way traffic shall be as specified in the following Table:

TABLE

Type of Metal Container	Number of Workers Conveying Metal	Minimum Width
Hand shank ladles and crucibles	2 or less	90 centimetres
Hand shank ladles and crucibles	More than 2	120 centimetres
Ladle or crucible on truck, buggy or overhead track	Not applicable	60 centimetres wider than greatest width of ladle, crucible, truck, buggy or container support

R.R.O. 1990, Reg. 851, s. 90 (1).

(2) Where a gangway is used for traffic in both directions but molten metal is conveyed in one direction only, the width required by subsection (1) shall be increased by at least ninety centimetres. R.R.O. 1990, Reg. 851, s. 90 (2).

(3) Where a gangway is used for carrying molten metal in both directions, the width required by subsection (1) shall be doubled. R.R.O. 1990, Reg. 851, s. 90 (3).

(4) Where a ladle is carried by an overhead crane,

(a) adequate warning shall be given before the ladle is moved; and

(b) the danger area over which it is transported shall be clear of any worker. R.R.O. 1990, Reg. 851, s. 90 (4).

91. Where a hand shank ladle or crucible is used to pour metal, the minimum width of a pouring aisle shall be as specified in the following Table:

TABLE

Height of Mould Above Aisle Level	Number of Workers Allocated to the Pouring Operation	Minimum Width of a Pouring Aisle
Less than 50 centimetres	Not more than 2	40 centimetres
50 centimetres or greater	Not more than 2	60 centimetres
Any height	More than 2	90 centimetres

R.R.O. 1990, Reg. 851, s. 91; O. Reg. 420/10, s. 15.

92. Where molten metal is poured from a crane, trolley or truck ladle, the minimum width of a pouring aisle shall not be less than thirty centimetres greater than the greatest width of the ladle equipment, except where a bottom-pour ladle is used, in which case the aisle width shall be ninety centimetres or more. R.R.O. 1990, Reg. 851, s. 92.

93. Where a worker is engaged in the handling of molten metal, gaiter-type boots shall be worn together with leggings or other protective clothing such that the tops of the boots are overlapped to protect the worker from injury due to molten metal. R.R.O. 1990, Reg. 851, s. 93.

94. A tilting ladle for molten metal shall be secured against accidental overturning. R.R.O. 1990, Reg. 851, s. 94.

95. A cupola shall have,

- (a) legs and supports protected from damage by molten metal;
- (b) doors on the top hinged to act as explosion vents to the outdoors when equipped with a closed top;
- (c) a positive means of preventing the accumulation of combustible gases in the air supply system when the air supply fails; and
- (d) a continuous open flame or other means of ignition maintained above the charging level of the cupola while the cupola is in operation and until all combustible material in the cupola is consumed. R.R.O. 1990, Reg. 851, s. 95.

96. (1) Subject to subsection (2), the bottom of a cupola shall be supported by one or more adequate metal props with metal bases and wedges supported on concrete or other solid footing. R.R.O. 1990, Reg. 851, s. 96 (1).

(2) The bottom of a cupola shall be dropped only,

(a) after a visual and audible warning signal has been given for at least three minutes; and

(b) by having the prop or props removed by a winch or similar device operated from outside a wall or shield at the cupola or from another safe location. R.R.O. 1990, Reg. 851, s. 96 (2).

(3) As soon as is practicable after a cupola is emptied, coke slag and unmelted metal from the dropping of the cupola bottom shall be removed by a mechanical rake or other mechanical means. R.R.O. 1990, Reg. 851, s. 96 (3).

97. (1) Subject to subsection (2), material to be charged into molten metal shall be free from ice or moisture. R.R.O. 1990, Reg. 851, s. 97 (1).

(2) Subsection (1) does not apply where precautions have been taken to ensure that any resultant reaction will not endanger any worker. R.R.O. 1990, Reg. 851, s. 97 (2).

98. A completely enclosed vessel shall be broken open prior to its being charged into a furnace. R.R.O. 1990, Reg. 851, s. 98.

99. Where metal castings or scrap are broken by means of a dropping device, or similar device, a permanent shield of wood planking at least thirty-eight millimetres thick shall be provided to protect workers from flying metal fragments. R.R.O. 1990, Reg. 851, s. 99.

100. A container used for holding or transporting molten metal shall be dry before use. R.R.O. 1990, Reg. 851, s. 100.

101. The floor and any water system immediately surrounding a melting unit shall be so constructed as to prevent the accumulation of moisture under or near the melting unit. R.R.O. 1990, Reg. 851, s. 101.

102. Where molten metal is handled on a gallery, mezzanine or other area having any working space below it, the gallery, mezzanine or area shall have a solid floor that will prevent molten metal from leaking or burning through it and the gallery, mezzanine or other area shall have a solid barrier, of not less than 1.05 metres in height, on all exposed sides to prevent metal spillage from the gallery, mezzanine or other area. R.R.O. 1990, Reg. 851, s. 102.

LOGGING

103. In this section and in sections 104 to 119,

"bucking" means the act of sawing a log or a tree that has been felled into smaller pieces; ("tronçonnage")

"chicot" means,

(a) a dead tree, or

(b) a dead limb of a tree that may endanger a worker; ("chicot")

"felling area" means an area where trees are being felled and into which they might fall; ("parterre de coupe")

"hang up" means a tree that has not fallen to the ground after being,

(a) partly or wholly separated from its stump, or

(b) displaced from its natural position; ("encroué")

"haul road" means a road, other than a highway as defined in the *Highway Traffic Act*, on which vehicles used to haul logs are operated; ("chemin d'exploitation")

"landing area" means a cleared area where trees or logs are stored, measured, processed, unloaded or loaded and includes a log dump; ("dépôt transitoire")

"limbing" means the act of removing limbs from a tree before or after felling; ("ébranchage")

"logger" means a worker who engages in logging and includes the employer and any person under the control of the employer; ("travailleur forestier")

"skidding" means the operation of moving logs or trees by pulling across the terrain; ("débusquage")

"snag" means any material or object that may interfere with the safe movement of a tree or log or that may endanger a person or any equipment; ("obstacle")

"spring pole" means a section of tree, or bush which is, by virtue of its arrangement in relation to other materials, under tension; ("perche sous tension")

"stake" means a wooden or metal post used to support and prevent the lateral movement of logs; ("ridelle")

"tree" means a tree that is standing or is down and from which the limbs

have not been removed. (“arbre”) R.R.O. 1990, Reg. 851, s. 103; O. Reg. 630/94, s. 4.

104. (1) Sections 105 to 106.2 apply to employers who undertake logging operations. O. Reg. 488/01, s. 1.

(2) In sections 105 to 106.2,

“registered” means registered with the Ministry in order to complete a training program referred to in subsection 105 (1). O. Reg. 488/01, s. 1; O. Reg. 60/18, s. 5; O. Reg. 186/19, s. 5; O. Reg. 434/21, s. 2.

105. (1) Every employer shall establish and maintain the following training programs, approved by the Ministry:

1. For cutters and skidder operators,
 - i. Cutter-Skidder Operator (Program # P750000),
 - ii. Cutter (Program # P750010), and
 - iii. Skidder-Operator (Program # P750020).
2. For mechanical harvesting equipment operators, Mechanical Harvesting Equipment Operator (Program # P850715) and,
 - i. Feller Buncher Operator (Program # P750035),
 - ii. Cut-to-Length Processor Operator (Program # P750045),
 - iii. Grapple Skidder Operator (Program # P750055),
 - iv. Forwarder or Transporter Operator (Program # P750065),
 - v. Delimber Operator (Program # P750075),
 - vi. Slasher Operator (Program # P750085), and
 - vii. Chipper Operator (Program # P750095). O. Reg. 488/01, s. 1; O. Reg. 60/18, s. 6 (1); O. Reg. 186/19, s. 6 (1); O. Reg. 434/21, s. 3 (1, 2).

(2) A document issued by the Ministry of Training, Colleges and Universities, showing that a worker is registered for a training program referred to in subsection (1) or has successfully completed it, is conclusive proof, for the purposes of sections 106, 106.1 and 106.2, of the worker being registered for the program or of his or her successful completion of the program, as the case may be. O. Reg. 488/01, s. 1; O. Reg. 60/18, s. 6 (2); O. Reg. 186/19, s. 6 (2); O. Reg. 434/21, s. 3 (1).

(3) REVOKED: O. Reg. 60/18, s. 6 (3).

106. (1) The employer shall ensure that,

- (a) every cutter has successfully completed Cutter-Skidder Operator (Program # P750000) or Cutter (Program # P750010); and
- (b) every skidder operator has successfully completed Cutter-Skidder Operator (Program # P750000) or Skidder Operator (Program # P750020). O. Reg. 488/01, s. 1.

(2) The employer shall ensure that every cutter or skidder operator who has not successfully completed the training required under subsection (1) is registered for the appropriate program before performing work to which the program relates. O. Reg. 488/01, s. 1.

(3) REVOKED: O. Reg. 60/18, s. 7 (1)

(4) The employer shall ensure that every worker who is registered under subsection (2) successfully completes the appropriate program within one year after being registered. O. Reg. 488/01, s. 1.

106.1 (1) The employer shall ensure that every worker who operates mechanical harvesting equipment has successfully completed the appropriate program referred to in subparagraphs 2 i to vii of subsection 105 (1). O. Reg. 488/01, s. 1.

(2) The employer shall ensure that every worker who operates mechanical harvesting equipment and has not successfully completed the training required under subsection (1) is registered for the appropriate program before performing work to which the program relates. O. Reg. 488/01, s. 1.

(3) REVOKED: O. Reg. 60/18, s. 8 (1).

(4) The employer shall ensure that every worker who is registered under subsection (2) successfully completes the appropriate program within one year after being registered. O. Reg. 488/01, s. 1; O. Reg. 60/18, s. 8 (2).

106.2 (1) The employer shall ensure that every worker who supervises the operation of mechanical harvesting equipment has successfully completed Supervisor Training Program (Program # P750025) before performing supervisory work relating to mechanical harvesting equipment. O. Reg. 488/01, s. 1; O. Reg. 434/21, s. 4.

(2) REVOKED: O. Reg. 60/18, s. 9.

107. (1) Subject to subsection (2), a felling area shall be kept clear of

workers. R.R.O. 1990, Reg. 851, s. 107 (1).

(2) Subsection (1) does not apply to,

- (a) a worker authorized by the employer or supervisor to be in the felling area; or
- (b) an inspector or worker accompanying an inspector in the course of their duties. R.R.O. 1990, Reg. 851, s. 107 (2).

108. A landing area shall have sufficient space cleared of any hazard to enable operations to be performed without endangering any worker. R.R.O. 1990, Reg. 851, s. 108.

109. A tree shall,

- (a) be felled only,
 - (i) after all workers other than the logger felling the tree are cleared from the danger area,
 - (ii) after all snags have been cut and cleared away,
 - (iii) after all chicots and spring poles in the vicinity of the tree being felled have been lowered safely to the ground, and
 - (iv) in such a manner that the logger felling the tree is able to stand clear of the tree during its fall;
- (b) be felled alongside or across a road only after the road has been blocked off or controlled by signaller; and
- (c) be limbed, bucked or topped only when the logger is in a position so that the limb, log or top when severed cannot roll or drop on the logger. R.R.O. 1990, Reg. 851, s. 109.

110. When a hang up occurs,

- (a) the logger shall keep the felling area clear of all workers; and
- (b) the hang up shall,
 - (i) be felled forthwith by winching or pulling using a chain or cable from a safe distance or by other safe means,
 - (ii) not be climbed by any worker,
 - (iii) not be lowered by felling another tree into or onto it, and
 - (iv) not be removed by cutting the supporting tree. R.R.O. 1990, Reg. 851, s. 110.

111. A spring pole shall be severed or cut in a manner that will not

endanger,

- (a) the logger cutting or severing the spring pole; or
- (b) any other worker. R.R.O. 1990, Reg. 851, s. 111.

112. Skidding shall be done,

- (a) only when all loggers, other than the operator of the vehicle doing the skidding, are clear of the danger area; and
- (b) so as not to raise the log being skidded to a height that might,
 - (i) cause the vehicle moving the log to upend or overturn, or
 - (ii) otherwise endanger the operator of the vehicle moving the log. R.R.O. 1990, Reg. 851, s. 112.

113. A log shall be loaded or unloaded only when,

- (a) the requirements of section 56 are met; and
- (b) the immediate area is clear of all workers except those engaged or assisting in the loading or unloading. R.R.O. 1990, Reg. 851, s. 113.

114. Except for a truck, a vehicle used in logging shall be equipped with a canopy that is,

- (a) of sufficient strength and construction to protect any worker in the cab from any load likely to fall on the canopy; and
- (b) installed by welding or bolting to the frame of the vehicle. R.R.O. 1990, Reg. 851, s. 114; O. Reg. 420/10, s. 16.

115. A truck used in logging shall have all rear windows guarded against penetration by any part of its load by a guard the strength of which is equivalent to the strength of the cab in which the window is located. R.R.O. 1990, Reg. 851, s. 115.

116. (1) A vehicle used for hauling logs shall,

- (a) comply with section 55;
- (b) be so loaded that no log extends,
 - (i) outside the stakes, or
 - (ii) farther than one-half its diameter above the stakes;
- (c) have its load secured with chains or cables so as to prevent the dislodging or other movement of the load or any part thereof;
- (d) while any worker is in the cab, not be loaded or unloaded by a method in which a boom or part of the load is likely to pass over

the cab;

- (e) have the cab occupied by more than two workers only in an emergency;
- (f) subject to clause (e), be operated only when all workers are clear of the vehicle and of its load; and
- (g) when unable to be unloaded completely by mechanical means,
 - (i) be equipped with a tripping device for releasing the load that is so located that the worker operating the device is not endangered, and
 - (ii) have its load released only in compliance with subclause (i).
R.R.O. 1990, Reg. 851, s. 116 (1); O. Reg. 420/10, s. 17.

(2) Where a truck or trailer used for hauling logs is equipped with stakes and the stakes are trip stakes, such stakes shall only be located on the right-hand side or rear of the truck or trailer. R.R.O. 1990, Reg. 851, s. 116 (2).

117. A haul road shall,

- (a) be adequate to provide for the safe operation of vehicles;
- (b) have by-passes or turnout spaces at sufficiently frequent intervals to permit the safe passing of vehicles using the road; and
- (c) have signs warning of the approach to every,
 - (i) bridge,
 - (ii) crossroad,
 - (iii) blind curve,
 - (iv) steep grade, and
 - (v) railway crossing. R.R.O. 1990, Reg. 851, s. 117.

118. A bridge on a haul road shall,

- (a) be structurally adequate to support any load likely to be applied to it;
- (b) have curbs of a height of not less than fifteen centimetres on each side of the travelled portion of the bridge;
- (c) be of sufficient width between curbs to permit the passage of vehicles using the bridge; and
- (d) have markers which clearly indicate the width and ends of the

bridge. R.R.O. 1990, Reg. 851, s. 118.

119. A vehicle used to transport loggers shall have the part of the vehicle in which the loggers are transported,

- (a) structurally adequate to support any load likely to be applied to it;
- (b) provided with an adequate number of seats securely attached to the vehicle so that all loggers being transported may be seated;
- (c) illuminated by an electrical lighting system;
- (d) equipped with a means of communication between the loggers and operator of the vehicle to enable the loggers to signal the operator to stop;
- (e) adequately ventilated to protect loggers from noxious fumes and gases;
- (f) free of tools, equipment or flammable liquid, which may be in racks outside the logger compartment;
- (g) when used in inclement weather,
 - (i) enclosed to provide protection from the weather, and
 - (ii) adequately heated to protect the passengers from undue discomfort due to cold; and
- (h) provided with emergency exits in accordance with the provisions of the Highway Traffic Act. R.R.O. 1990, Reg. 851, s. 119.

PART I.1

(ss. 119.1-119.20) REVOKED: O. Reg. 98/11, s. 2.

PART II BUILDINGS

120. Except as prescribed in this Part, the Building Code applies to all industrial establishments with respect to,

- (a) access to an exit;
- (b) exit from a floor area;
- (c) structural adequacy;
- (d) washrooms;
- (e) service rooms;
- (f) the fire-resistance rating of a separation for an access to an exit,

service room and a process room that contains a flammable substance;

- (g) the fire protection rating of a closure. R.R.O. 1990, Reg. 851, s. 120; O. Reg. 420/10, s. 23.

121. In this Part,

“hazardous room” means, with respect to an industrial establishment, a room containing a substance which, because of its chemical nature, the form in which the substance exists or its handling or processing, may explode or become easily ignited creating a condition of imminent hazard to a person’s health or safety. R.R.O. 1990, Reg. 851, s. 121.

122. (1) This section applies with respect to a hazardous room,

(a) with an area greater than fifteen square metres; or

(b) requiring a distance of travel greater than 4.5 metres from any point in the room to an egress doorway. R.R.O. 1990, Reg. 851, s. 122 (1).

(2) A hazardous room shall be located in a floor area that has at least two exits. R.R.O. 1990, Reg. 851, s. 122 (2).

(3) A hazardous room shall have at least two egress doorways that are at least three-quarters of the length of the diagonal distance of the room from each other. R.R.O. 1990, Reg. 851, s. 122 (3).

(4) One egress doorway must be located within a maximum distance of twenty-three metres from any point in a hazardous room. R.R.O. 1990, Reg. 851, s. 122 (4).

123. (1) The requirements of the Fire Code respecting fire extinguishers apply at industrial establishments. 1990, Reg. 851, s. 123 (1).

(2) The requirements of the Fire Code respecting keeping egress doorways, public corridors and exits free from obstruction apply at industrial establishments. 1990, Reg. 851, s. 123 (2).

(3) In this section,

“Fire Code” means Ontario Regulation 213/07 (Fire Code) made under the *Fire Protection and Prevention Act, 1997*. R.R.O. 1990, Reg. 851, s. 123 (3); O. Reg. 420/10, s. 24.

PART III INDUSTRIAL HYGIENE

124. (1) Where a worker is required to work with, or is likely to be exposed to, a hazardous biological or chemical agent that could cause

injury to the eye or skin, an employer shall provide as many of the following as are needed for adequate emergency treatment:

1. Eye wash facilities.
2. Emergency showers.
3. Antidotes, flushing fluids or washes. O. Reg. 186/19, s. 7.

(2) The emergency equipment or treatments described in subsection (1) must,

- (a) be clearly marked with a sign or label;
- (b) be located or installed in a conspicuous place near where the hazardous biological or chemical agent is kept or used;
- (c) be readily accessible to workers; and
- (d) have instructions for its use displayed on the equipment or treatment or as near to it as is practical. O. Reg. 186/19, s. 7.

125. REVOKED: O. Reg. 186/19, s. 7.

126. Removal of material shall be done in such a way as not to cause a hazard. R.R.O. 1990, Reg. 851, s. 126.

127. An industrial establishment shall be adequately ventilated by either natural or mechanical means such that the atmosphere does not endanger the health and safety of workers. R.R.O. 1990, Reg. 851, s. 127.

128. (1) Replacement air shall be provided to replace air exhausted. R.R.O. 1990, Reg. 851, s. 128 (1).

(2) The replacement air shall,

- (a) be heated, when necessary, to maintain at least the minimum temperature in the workplace specified in section 129;
- (b) be free from contamination with any hazardous dust, vapour, smoke, fume, mist or gas; and
- (c) enter in such a manner so as,
 - (i) to prevent blowing of settled dust into the workplace,
 - (ii) to prevent interference with any exhaust system, and
 - (iii) not to cause undue drafts. R.R.O. 1990, Reg. 851, s. 128 (2).

(3) The discharge of air from any exhaust system shall be in such a manner so as to prevent the return of contaminants to any workplace. R.R.O. 1990, Reg. 851, s. 128 (3).

129. (1) Subject to subsection (2), an enclosed workplace shall be at a temperature,

- (a) suitable for the type of work performed; and
 - (b) not less than 18° Celsius. R.R.O. 1990, Reg. 851, s. 129 (1).
- (2) Clause (1) (b) does not apply to a workplace,
- (a) that is normally unheated;
 - (b) where the necessity of opening doors makes the heating of the area to the temperature specified in clause (1) (b) impracticable;
 - (c) where perishable goods requiring lower temperatures are processed or stored;
 - (d) where radiant heating is such that a worker working in the area has the degree of comfort that would result were the area heated to the temperature specified in clause (1) (b);
 - (e) where the process or activity is such that the temperature specified in clause (1) (b) could cause discomfort; or
 - (f) during the first hour of the main operating shift where process heat provides a substantial portion of building heat. R.R.O. 1990, Reg. 851, s. 129 (2).

130. A worker who may be exposed to a biological, chemical or physical agent that may endanger the worker's safety or health shall be trained,

- (a) to use the precautions and procedures to be followed in the handling, use and storage of the agent;
- (b) in the proper use and care of required personal protective equipment; and
- (c) in the proper use of emergency measures and procedures. R.R.O. 1990, Reg. 851, s. 130.

131. No food, drink or tobacco shall be taken into, left or consumed in any room, area or place where any substance that is poisonous by ingestion is exposed. R.R.O. 1990, Reg. 851, s. 131.

132. (1) Subject to subsection (2), the regulations made under the Act respecting designated substances and an order by a Director under section 33 of the Act, potable drinking water shall be provided,

- (a) from,
 - (i) a fountain with an upward jet, or

(ii) a tap from a piped water supply or a covered vessel, together with a supply of single-use cups in a sanitary container located near the tap;

(b) on every floor where work is regularly performed; and

(c) within 100 metres of any area where work is regularly performed. R.R.O. 1990, Reg. 851, s. 132 (1); O. Reg. 565/06, s. 1; O. Reg. 420/10, s. 25.

(2) Subsection (1) does not apply to logging, except in logging camps. R.R.O. 1990, Reg. 851, s. 132 (2).

133. (1) Except for emergency facilities, hot and cold water shall be provided at each shower. R.R.O. 1990, Reg. 851, s. 133 (1).

(2) Hot water required under subsection (1) shall not,

(a) be less than 30° Celsius;

(b) exceed 60° Celsius; or

(c) be directly mixed with steam. R.R.O. 1990, Reg. 851, s. 133 (2); O. Reg. 420/10, s. 26.

134. Where workers are exposed to a substance that,

(a) is poisonous by ingestion; and

(b) can contaminate the skin,

shower rooms and individual lockers for street and work clothes shall be provided. R.R.O. 1990, Reg. 851, s. 134.

135. Where ten or more workers are employed, a room or other space shall be provided,

(a) affording reasonable privacy; and

(b) equipped with one or more cots and chairs, unless such facilities are provided at a first-aid station. R.R.O. 1990, Reg. 851, s. 135.

136. A place suitable for eating purposes shall be provided where,

(a) thirty-five or more workers are employed; or

(b) there is any room, area or place in which there is exposure to a substance that is poisonous by ingestion. R.R.O. 1990, Reg. 851, s. 136.

137. Protective clothing or other safety device that has been worn next to the skin shall be cleaned and disinfected prior to being worn by

another worker. R.R.O. 1990, Reg. 851, s. 137.

138. (1) Where a worker is likely to be exposed to an atmosphere at atmospheric pressure with an oxygen content of less than 19.5 per cent, the worker shall be protected by mechanical ventilation so that the worker's safety and health is not endangered. R.R.O. 1990, Reg. 851, s. 138 (1); O. Reg. 289/17, s. 1.

(2) Where the measures prescribed by subsection (1) are not practicable, the worker shall be protected by air supplied breathing equipment so that the worker's safety and health is not endangered. R.R.O. 1990, Reg. 851, s. 138 (2).

139. REVOKED: O. REG. 382/15, s. 1.

TABLE 1 REVOKED: O. Reg. 494/09, s. 3.

FORM 1 REVOKED: O. Reg. 420/10, s. 28.

FORM 2 REVOKED: O. Reg. 60/18, s. 10

Ontario Court of Justice
Last Updated: April 1, 2018

SCHEDULE 67.3

Occupational Health and Safety Act (as it relates to Regulation 851 of the Revised Regulations of Ontario, 1990)

Item	Offence	Section	Set Fine
1	Employer failing to ensure a safe work surface for worker under section 11 of Reg. 851	25 (1) (c)	\$550
2	Supervisor failing to ensure worker is working on a safe work surface under section 11 of Reg. 851	27 (1) (a)	\$450
3	Worker failing to work on safe work surface under section 11 of Reg. 851	28 (1) (a)	\$250
4	Employer failing to ensure there is a guardrail as required under subsection 13 (1) of Reg. 851	25 (1) (a)	\$550
5	Supervisor failing to ensure worker works with guardrail under subsection 13 (1) of Reg. 851	27 (1) (a)	\$450
6	Worker failing to work with guardrail under subsection 13 (1) of Reg. 851	28 (1) (a)	\$250
7	Employer failing to ensure opening is covered as required under section 15 of Reg. 851	25 (1) (a)	\$550
8	Supervisor failing to ensure worker works with covered opening under section 15 of Reg. 851	27 (1) (a)	\$450
9	Worker failing to work with covered opening under section 15 of Reg. 851	28 (1) (a)	\$250
10	Employer failing to ensure machine has guarding as required under section 24 of Reg. 851	25 (1) (a)	\$650
11	Supervisor failing to ensure that worker uses machine with an exposed moving part that is equipped or guarded by a guard or other device under section 24 of Reg. 851	27 (1) (a)	\$550

12	Worker failing to ensure exposed moving part of machine is equipped or guarded under section 24 of Reg. 851	28 (1) (a)	\$350
13	Employer failing to ensure machine has guarding as required under section 25 of Reg. 851	25 (1) (a)	\$650
14	Supervisor failing to ensure worker uses a machine with guarding under section 25 of Reg. 851	27 (1) (a)	\$550
15	Worker failing to use machine with guarding under section 25 of Reg. 851	28 (1) (a)	\$350
16	Employer failing to ensure machine has guarding as required under section 26 of Reg. 851	25 (1) (a)	\$650
17	Supervisor failing to ensure worker uses a machine with guarding under section 26 of Reg. 851	27 (1) (a)	\$550
18	Worker failing to use machine with guarding under section 26 of Reg. 851	28 (1) (a)	\$250
19	Employer failing to ensure machine has effective operating control as required under section 28 of Reg. 851	25 (1) (a)	\$650
20	Supervisor failing to ensure worker works with effective operating control that acts as a guard under clause 28 (c) of Reg. 851	27 (1) (a)	\$550
21	Worker failing to work with effective operating control that acts as a guard under clause 28 (c) of Reg. 851	28 (1) (a)	\$350
22	Employer failing to provide safe grinding wheel under section 29 of Reg. 851	25 (1) (a)	\$550
23	Employer failing to ensure that grinding wheel is used safely as required under section 29 of Reg. 851	25 (1) (d)	\$550
24	Supervisor failing to ensure worker uses grinding wheel safely as required under section 29 of Reg. 851	27 (1) (a)	\$450
25	Worker failing to use grinding wheel safely as required under section 29 of Reg. 851	28 (1) (a)	\$250

26	Employer failing to provide safe hand-held nailing gun or similar tool under clause 38 (a) of Reg. 851	25 (1) (a)	\$550
27	Employer failing to ensure that hand-held nailing gun or similar tool is used safely as required under clause 38 (b) of Reg. 851	25 (1) (d)	\$550
28	Supervisor failing to ensure a worker uses a hand-held nailing gun or similar tool safely under clause 38 (b) of Reg. 851	27 (1) (a)	\$450
29	Worker failing to use a hand-held nailing gun or similar tool safely under clause 38 (b) of Reg. 851	28 (1) (a)	\$250
30	Employer failing to provide safe chain saw under section 39 of Reg. 851	25 (1) (a)	\$550
31	Employer failing to ensure that chain saw provided is used safely under section 39 of Reg. 851	25 (1) (d)	\$550
32	Supervisor failing to ensure worker uses a chain saw safely under section 39 of Reg. 851	27 (1) (a)	\$450
33	Worker failing to use chain saw safely under section 39 of Reg. 851	28 (1) (a)	\$250
34	Supervisor failing to ensure no work is done on or near live exposed parts of electrical installations, equipment or conductors without the power supply being disconnected, locked out and tagged under subsection 42 (1) of Reg. 851	27 (1) (a)	\$550
35	Worker working on or near live exposed parts of electrical installations, equipment or conductors without the power supply being disconnected, locked out and tagged under subsection 42 (1) of Reg. 851	28 (1) (a)	\$350
36	Supervisor failing to ensure worker uses protective equipment and procedures while doing electrical work under subsection 42.1 (2) of Reg. 851	27 (1) (a)	\$450

37	Employer failing to provide portable electrical tool protected by a ground fault circuit interrupter under section 44.1 of Reg. 851	25 (1) (a)	\$550
38	Employer failing to ensure portable electrical tool protected by a ground fault circuit interrupter when required under section 44.1 of Reg. 851 is used	25 (1) (d)	\$550
39	Supervisor failing to ensure worker is using a portable electrical tool protected by a ground fault circuit interrupter under section 44.1 of Reg. 851	27 (1) (a)	\$450
40	Worker failing to use a portable electrical tool protected by a ground fault circuit interrupter under section 44.1 of Reg. 851	28 (1) (a)	\$250
41	Employer failing to provide safe compressed gas cylinder under section 49 of Reg. 851	25 (1) (a)	\$550
42	Employer failing to ensure that compressed gas cylinder used safely under section 49 of Reg. 851	25 (1) (d)	\$550
43	Supervisor failing to ensure a worker uses gas cylinder safely under section 49 of Reg. 851	27 (1) (a)	\$450
44	Worker failing to use compressed gas cylinder safely under section 49 of Reg. 851	28 (1) (a)	\$250
45	Employer failing to ensure that lifting device is operated safely under clause 51 (2) (b) of Reg. 851	25 (1) (c)	\$550
46	Supervisor failing to ensure operator of a lifting device works safely under clause 51 (2) (b) of Reg. 851	27 (1) (a)	\$450
47	Operator of lifting device failing to work safely under clause 51 (2) (b) of Reg. 851	28 (1) (a)	\$250
48	Employer failing to ensure that crane, lift truck or similar equipment has safe platform under clause 52 (a) of Reg. 851	25 (1) (a)	\$550

49	Employer failing to ensure that crane, lift truck or similar equipment used safely under section 52 of Reg. 851	25 (1) (d)	\$550
50	Supervisor failing to ensure worker uses crane, lift truck or similar equipment safely under section 52 of Reg. 851	27 (1) (a)	\$450
51	Worker failing to use equipment for lifting a worker safely under section 52 of Reg. 851	28 (1) (a)	\$250
52	Supervisor failing to ensure worker leaves unattended vehicle immobilized and secured under section 57 of Reg. 851	27 (1) (a)	\$450
53	Worker failing to immobilize and secure unattended vehicle under section 57 of Reg. 851	28 (1) (a)	\$250
54	Supervisor failing to ensure worker leaves powered equipment unattended in safe manner under section 58 of Reg. 851	27 (1) (a)	\$450
55	Worker failing to leave powered equipment unattended in safe manner under section 58 of Reg. 851	28 (1) (a)	\$250
56	Supervisor failing to ensure that worker does not bring equipment closer than specified distance to live power line under section 60 of Reg. 851	27 (1) (a)	\$550
57	Worker bringing equipment closer than specified distance to live power line under section 60 of Reg. 851	28 (1) (a)	\$350
58	Employer failing to ensure that compressed air or other gas blowing device used safely under section 66 of Reg. 851	25 (1) (d)	\$550
59	Supervisor failing to ensure that worker uses compressed air or other gas blowing device safely under section 66 of Reg. 851	27 (1) (a)	\$450
60	Worker failing to use compressed air or other gas blowing device safely under section 66 of Reg. 851	28 (1) (a)	\$250

61	Employer failing to provide safe portable ladder under section 73 of Reg. 851	25 (1) (a)	\$550
62	Employer failing to ensure that a portable ladder provided under section 73 of Reg. 851 is used safely	25 (1) (d)	\$550
63	Supervisor failing to ensure worker uses a portable ladder safely under section 73 of Reg. 851	27 (1) (a)	\$450
64	Worker failing to use portable ladder safely under section 73 of Reg. 851	28 (1) (a)	\$250
65	Supervisor failing to ensure worker blocks temporarily elevated machinery, equipment or material under section 74 of Reg. 851	27 (1) (a)	\$450
66	Worker failing to block temporarily elevated machinery, equipment or material under section 74 of Reg. 851	28 (1) (a)	\$250
67	Supervisor failing to ensure worker does not work on a machine, transmission machinery, device or thing that is not stopped and blocked under section 75 of Reg. 851	27 (1) (a)	\$450
68	Worker working on a machine, transmission machinery, device or thing that is not stopped and blocked under section 75 of Reg. 851	28 (1) (a)	\$350
69	Supervisor failing to ensure worker takes measures under section 76 of Reg. 851 to prevent machine, transmission machinery, device or thing from starting where starting may endanger safety of worker	27 (1) (a)	\$450
70	Worker failing to take measures under section 76 of Reg. 851 to prevent machine, transmission machinery, device or thing from starting where <u>starting may endanger safety of worker</u>	28 (1) (a)	\$350
71	Employer failing to ensure appropriate head protection provided under section 80 of Reg. 851 is worn	25 (1) (d)	\$550

72	Supervisor failing to ensure worker wears appropriate head protection under section 80 of Reg. 851	27 (1) (a)	\$450
73	Employer failing to ensure appropriate eye protection provided under section 81 of Reg. 851 is worn	25 (1) (d)	\$550
74	Supervisor failing to ensure worker wears appropriate eye protection under section 81 of Reg. 851	27 (1) (a)	\$450
75	Employer failing to ensure appropriate foot protection provided under section 82 of Reg. 851 is worn	25 (1) (d)	\$550
76	Supervisor failing to ensure worker wears appropriate foot protection under section 82 of Reg. 851	27 (1) (a)	\$450
77	Employer failing to ensure worker's hair suitably confined under subsection 83 (1) of Reg. 851	25 (1) (c)	\$550
78	Supervisor failing to ensure worker's hair suitably confined under subsection 83 (1) of Reg. 851	27 (1) (a)	\$450
79	Worker working without hair suitably confined under subsection 83 (1) of Reg. 851	28 (1) (a)	\$250
80	Employer failing to ensure worker does not wear loose or dangling jewellery or clothing near source of entanglement under subsection 83 (2) of Reg. 851	25 (1) (c)	\$550
81	Supervisor failing to ensure worker does not work with loose or dangling jewellery or clothing near source of entanglement under subsection 83 (2) of Reg. 851	27 (1) (a)	\$450
82	Worker working with loose or dangling jewellery or clothing near source of entanglement under subsection 83 (2) of Reg. 851	28 (1) (a)	\$250

83	Employer failing to ensure proper skin protection provided under section 84 of Reg. 851 is used	25 (1) (d)	\$550
84	Supervisor failing to ensure worker works with proper skin protection under section 84 of Reg. 851	27 (1) (a)	\$450
85	Worker failing to work with proper skin protection under section 84 of Reg. 851	28 (1) (a)	\$250
86	Employer failing to ensure appropriate fall protection equipment required under section 85 of Reg. 851 is worn	25 (1) (d)	\$650
87	Supervisor failing to ensure worker wears fall protection equipment under section 85 of Reg. 851	27 (1) (a)	\$550
88	Employer failing to ensure protective clothing provided is worn to protect from hazards caused by molten metal under section 93 of Reg. 851	25 (1) (d)	\$550
89	Supervisor failing to ensure worker wears protective clothing provided to protect from hazards caused by molten metal under section 93 of Reg. 851	27 (1) (a)	\$450
90	Worker failing to wear protective clothing provided to protect from hazards caused by molten metal under section 93 of Reg. 851	28 (1) (a)	\$250
91	Employer failing to ensure a tree is felled, limbed, bucked or topped safely under section 109 of Reg. 851	25 (1) (c)	\$650
92	Supervisor failing to ensure logger fells, limbs, bucks or tops a tree safely under section 109 of Reg. 851	27 (1) (a)	\$550
93	Logger failing to fell, limb, buck or top a tree safely under section 109 of Reg. 851	28 (1) (a)	\$350
94	Employer failing to ensure a hang up is dealt with safely under section 110 of Reg. 851	25 (1) (c)	\$550

95	Supervisor failing to ensure worker deals with a hang up safely under section 110 of Reg. 851	27 (1) (a)	\$450
96	Worker failing to deal with a hang up safely under section 110 of Reg. 851	28 (1) (a)	\$250
97	Employer failing to ensure a spring pole is cut safely under section 111 of Reg. 851	25 (1) (c)	\$550
98	Supervisor failing to ensure worker cuts a spring pole safely under section 111 of Reg. 851	27 (1) (a)	\$450
99	Worker failing to cut spring pole safely under section 111 of Reg. 851	28 (1) (a)	\$250
100	Employer failing to ensure skidding is done safely under section 112 of Reg. 851	25 (1) (c)	\$550
101	Supervisor failing to ensure logger skids safely under section 112 of Reg. 851	27 (1) (a)	\$450
102	Logger failing to skid safely under section 112 of Reg. 851	28 (1) (a)	\$250
103	Employer failing to provide a vehicle used for hauling logs that complies with subsection 116 (1) of Reg. 851	25 (1) (a)	\$550
104	Employer failing to ensure vehicle provided for hauling logs is used safely under subsection 116 (1) of Reg. 851	25 (1) (d)	\$550
105	Supervisor failing to ensure worker uses a vehicle for hauling logs safely under subsection 116 (1) of Reg. 851	27 (1) (a)	\$450
106	Worker failing to use a vehicle for hauling logs safely under subsection 116 (1) of Reg. 851	28 (1) (a)	\$250
107	Employer failing to provide vehicle used to transport loggers that complies with section 119 of Reg. 851	25 (1) (a)	\$550
108	Employer failing to ensure worker uses vehicle to transport loggers safely under section 119 of Reg. 851	25 (1) (d)	\$550

109	Supervisor failing to ensure worker uses vehicle to transport loggers safely under section 119 of Reg. 851	27 (1) (a)	\$450

Ontario Court of Justice
Last Updated: April 1, 2018

SCHEDULE 67.4

Regulation 851 of the Revised Regulations of Ontario, 1990 under the
Occupational Health and Safety Act

Item	Offence	Section	Set Fine
0.1	Worker beginning work on electrical installations, equipment or conductors without ensuring safety requirements have been met	42 (1) and (2)	\$250
1.	Worker failing to use protective equipment and procedures while doing electrical work	42.1 (2)	\$350
2.	Worker failing to wear appropriate head protection	80	\$250
3.	Worker failing to wear appropriate eye protection	81	\$250
4.	Worker failing to wear appropriate foot protection	82	\$250
5.	Worker failing to wear fall protection equipment	85	\$350

REGULATION 213/91 – CONSTRUCTION PROJECTS

ONTARIO REGULATION 213/91**CONSTRUCTION PROJECTS**

Consolidation Period: From August 8, 2023 to the e-Laws currency date.

Last amendment: 241/23.

This is the English version of a bilingual regulation.

PART I**GENERAL****INTERPRETATION AND APPLICATION****1. (1) In this Regulation,**

“adequate”, in relation to a procedure, plan, material, device, object or thing, means,

(a) sufficient for both its intended and its actual use, and

(b) sufficient to protect a worker from occupational illness or occupational injury,

and “adequately” has a corresponding meaning; (“adéquat”, “adéquatement”)

“allowable unit stress”, in relation to a material, means,

(a) the allowable unit stress assigned to a material by the standards required under the Building Code, or

(b) if no allowable unit stress is assigned under clause (a), the allowable unit stress for the material as determined by an engineer in accordance with good engineering practice; (“taux de contrainte admissible”)

“approved”, in relation to a form, means approved by the Minister; (“approuvé”)

“blocker truck” means a truck that weighs at least 6,800 kilograms and has four-way flashers and a mounted flashing arrowboard sign; (“camion-barrière”)

“boom” means the projecting part of a backhoe, shovel, crane or similar lifting device from which a load is likely to be supported; (“flèche”)

"caisson" means,

- (a) a casing below ground or water level whether or not it is designed to contain air at a pressure greater than atmospheric pressure,
- (b) an excavation, including a waterwell but not a well within the meaning of the Oil, Gas and Salt Resources Act, drilled by an auger and into which a person may enter; ("caisson")

"cofferdam" means a structure constructed entirely or partially below water level or below the level of the groundwater table and intended to provide a work place that is free of water; ("batardeau")

"competent worker", in relation to specific work, means a worker who,

- (a) is qualified because of knowledge, training and experience to perform the work,
- (b) is familiar with the Occupational Health and Safety Act and with the provisions of the regulations that apply to the work, and
- (c) has knowledge of all potential or actual danger to health or safety in the work; ("travailleur compétent")

"conduit" means a sewer, a water main, a duct or cable for a telegraphic, telephonic, television or electrical service, a pipe or duct for the transportation of any solid, liquid or gas or any combination of these items and includes a service connection made or intended to be made thereto; ("canalisation")

"crash truck" means a blocker truck that is equipped with a crash-attenuating device; ("camion d'intervention")

"critical weld" means, in relation to a suspended work platform, a weld the failure of which could result in the complete or partial collapse of the suspended work platform; ("soudure essentielle")

"excavation" means the hole that is left in the ground, as a result of removing material; ("excavation")

"excavation depth" means the vertical dimension from the highest point of the excavation wall to a point level with the lowest point of the excavation; ("profondeur d'excavation")

"excavation width" means the least horizontal dimension between the two opposite walls of the excavation; ("largeur d'excavation")

"fall arrest system" means an assembly of components joined together so that when the assembly is connected to a fixed support, it is capable of arresting a worker's fall; ("dispositif antichute")

"fall restricting system" means a type of fall arrest system that has been designed to limit a worker's fall to a specified distance; ("limiteur de chute")

"falsework", in relation to a form or structure, means the structural supports and bracing used to support all or part of the form or structure; ("ouvrage provisoire")

"fixed support" means a permanent or temporary structure or a component of such a structure that can withstand all loads and forces the structure or component is intended to support or resist and is sufficient to protect a worker's health and safety, and includes equipment or devices that are securely fastened to the structure or component; ("support fixe")

"flammable liquid" means a liquid with a flash point below 37.8 degrees celsius and a vapour pressure not exceeding 275 kilopascals absolute at 37.8 degrees celsius; ("liquide inflammable")

"form" means the mould into which concrete or another material is to be placed; ("élément de coffrage")

"formwork" means a system of forms connected together; ("coffrage")

"freeway" means a controlled-access highway that has a continuous dividing median and a normal posted speed limit of 90 kilometres per hour or more; ("autoroute")

"full body harness" means a device that can arrest an accidental vertical or near vertical fall of a worker and which can guide and distribute the impact forces of the fall by means of leg and shoulder strap supports and an upper dorsal suspension assembly which, after the arrest, will not by itself permit the release or further lowering of the worker; ("harnais de sécurité")

"generic installation drawing" means a drawing and related documentation, if any, that,

- (a) identifies components, configurations and load limitations of a suspended work platform system or powered boatswain's chair,
- (b) is intended to be used at any location where all of the requirements in the drawing and documentation are satisfied, and
- (c) bears the seal and signature of an engineer confirming that a suspended work platform system or boatswain's chair installed in accordance with the drawing would be in compliance with the requirements of this Regulation; ("dessin d'installation générique")

"guardrail system" means an assembly of components joined together to provide a barrier to prevent a worker from falling from the edge of a surface; ("garde-corps")

"highway" means a common and public highway, street, avenue, parkway, driveway, square, place, bridge, viaduct or trestle, any part of which is intended for or used by the general public for the passage of vehicles; ("voie publique")

"longitudinal buffer area" means the area of a project between the end of a lane closure taper and the start of a work area; ("zone tampon longitudinale")

"magazine" means a place in which explosives are stored or kept, whether above or below ground; ("dépôt d'explosifs")

"multi-point suspended work platform" means a suspended work platform more than 750 millimetres in width or a system of suspended work platforms in which any one platform is more than 750 millimetres in width that is supported from an overhead fixed support system by at least three primary load-carrying means of suspension to maintain the stability of the work platform or system of work platforms; ("plateforme de travail suspendue multipoint")

"non-destructive test" means one of the following methods of testing or examining a material, component or part to evaluate its condition without subjecting it to physical distortion, damage or destruction:

1. Eddy current testing.
2. Magnetic particle testing.
3. Liquid penetrant testing.
4. Radiographic testing.
5. Ultrasonic testing; ("essai non destructif")

"public way" means a highway or other street, avenue, parkway, driveway, square, place, bridge, viaduct, or other open space to which the public has access, as of right or by expressed or implied invitation; ("passage public")

"rated platform capacity" means the combined weight of occupants, tools, equipment and other material that the manufacturer has indicated can be safely carried by a suspended work platform, work platform module or boatswain's chair; ("capacité nominale de la plateforme")

"roadway" means the travelled portion of a highway; ("chaussée")

"rotary foundation drill rig" means a drill rig used for boring holes in soil for the placement of foundations or earth retention structures but does not include a drill rig that,

- (a) is used for geotechnical sampling,
- (b) is used for drilling water, oil or gas wells,
- (c) is a rock drill or a diamond drill,
- (d) is a digger derrick,
- (e) is used for digging holes for posts, concrete forming tubes, poles or light standards,
- (f) is a pile driver without an auger,
- (g) is a horizontal boring machine, or
- (h) is a tunnel boring machine; ("foreuse rotative pour fondations")

"safety belt" means a belt worn around the waist of a worker and all the fittings for the belt appropriate for the use being made of it; ("ceinture de sécurité")

"safety factor" means the ratio of the failure load to the specified load or rated load; ("coefficient de sécurité")

"safety net" means a safety net that complies with section 26.8, and is located and supported in such a way that it arrests the fall of a worker who may fall into it without endangering the worker; ("filet de sécurité")

"self-erecting tower crane" means a tower crane that is capable of being erected without the use of ancillary equipment; ("grue à tour à montage autonome")

"service shaft" means a shaft by which people or materials are passed into or out of a tunnel under construction; ("puits de service")

"shaft" means an excavation with a longitudinal axis at an angle greater than 45 degrees from the horizontal that is used to pass people or materials into or out of a tunnel or that leads to a tunnel or that is used as an access to a boring or augering operation; ("puits")

"sheathing" means the members of shoring that are placed up against the walls of an excavation to directly resist the pressure exerted from the walls of the excavation; ("blindage")

"sign truck" means a vehicle that has,

- (a) four-way flashers and a mounted flashing arrowboard sign, or

(b) a portable trailer with a mounted flashing arrowboard sign; (“camion de signalisation”)

“site-specific installation drawing” means a drawing and related documentation, if any, that identifies components, configurations and load limitations of a suspended work platform system or powered boatswain’s chair for use at a specific site; (“dessin d’installation propre au site”)

“strut” means a transverse member of shoring that directly resists pressure from a wale; (“étais”)

“suitable”, in relation to a procedure, material, device, object or thing, means sufficient to protect a worker from damage to the worker’s body or health; (“convenable”)

“suspended work platform system” means an access system comprising one or more overhead fixed supports, one or more suspension lines, hoisting devices, if any, and one or more work platforms that can be moved vertically, but it does not include a boatswain’s chair or a multi-point suspended work platform; (“système de plateformes de travail suspendues”)

“tower crane” means a travelling, fixed or climbing mechanical device or structure that has,

(a) a boom, a jib or both,

(b) a power-driven drum and wire rope to raise, lower or move material, and

(c) a vertical mast; (“grue à tour”)

“travel restraint system” means an assembly of components capable of restricting a worker’s movement on a work surface and preventing the worker from reaching a location from which he or she could fall; (“limiteur de déplacement”)

“traverse”, when used in relation to a multi-point suspended work platform, means to move the platform horizontally, in a controlled manner, along the building or structure to which it is attached; (“déplacement horizontal”)

“trench” means an excavation where the excavation depth exceeds the excavation width; (“tranchée”)

“tunnel” means a subterranean passage into which a person may enter that is made by excavating beneath the overburden; (“tunnel”)

“underground”, in relation to work, means inside a shaft, tunnel or

caisson; (“souterrain”)

“vehicle” means a vehicle propelled by mechanical power and includes a trailer, a traction engine and a road-building machine; (“véhicule”)

“wale” means a longitudinal member of the shoring that is placed against the sheathing to directly resist the pressure from the sheathing; (“raidisseur”)

“work belt” means a belt that has a back support pad and a connecting hook at the front and that is capable of supporting a worker. (“ceinture de travail”) O. Reg. 213/91, s. 1 (1); O. Reg. 631/94, s. 1; O. Reg. 145/00, s. 1 (1-13); O. Reg. 85/04, s. 1; O. Reg. 628/05, s. 1; O. Reg. 345/15, s. 1 (1-3); O. Reg. 242/16, s. 1 (1), 2 (1-4); O. Reg. 142/17, s. 1.

(1.1) Every non-destructive test required by this Regulation shall be carried out and interpreted by a person,

(a) who has been certified by Natural Resources Canada to the appropriate level in accordance with the version of the CAN/CGSB Standard 48.9712-2014, Non-destructive Testing — Qualification and Certification of Personnel, as it may be amended from time to time, that was in effect at the time of certification; and

(b) whose certification described in clause (a) is valid at the time the test is carried out and interpreted. O. Reg. 241/23, s. 1 (2).

(2) In this Regulation, a short form listed in Column 1 of the Table to this subsection has the same meaning as the term set out opposite to it in Column 2.

TABLE

Item	Column 1 Short forms	Column 2 Corresponding terms
1.	ANSI	American National Standards Institute
2.	CSA	Canadian Standards Association
3.	CAN	National Standards of Canada

O. Reg. 213/91, s. 1 (2); O. Reg. 145/00, s. 1 (4); O. Reg. 345/15, s. 1 (4).

1.1 In this Regulation, a requirement that something be done in accordance with good engineering practice includes a requirement that it be done in a manner that protects the health and safety of all workers. O. Reg. 85/04, s. 2.

1.2 In this Regulation, a requirement that a design, drawing, instruction, report, specification, opinion or other document be prepared by an engineer includes a requirement that he or she sign and seal it. O. Reg. 85/04, s. 2.

2. This Part applies with respect to all projects. O. Reg. 213/91, s. 2.

ALTERNATIVE METHODS AND MATERIALS

3. An employer, owner or constructor may vary a procedure required by this Regulation or the composition, design, size or arrangement of a material, object, device or thing as required by this Regulation,

- (a) if the procedure, composition, design, size or arrangement as varied affords protection for the health and safety of workers that is at least equal to the protection that would otherwise be given; and
- (b) if the employer, owner or constructor gives written notice of the varied procedure, composition, design, size or arrangement to the joint health and safety committee or the health and safety representative, if any, for the work place. O. Reg. 213/91, s. 3.

DESIGNATION OF A PROJECT

4. A Director may designate in writing a part of a project as a project and the designated project is considered to be a project for the purposes of the Act and this Regulation. O. Reg. 213/91, s. 4; O. Reg. 145/00, s. 2.

REGISTRATION AND NOTICES

5. (1) Before beginning work at a project, each constructor and employer engaged in construction shall complete an approved registration form. O. Reg. 145/00, s. 3.

(2) The constructor shall ensure that,

- (a) each employer at the project provides to the constructor a completed approved registration form; and
- (b) a copy of the employer's completed form is kept at the project while the employer is working there. O. Reg. 145/00, s. 3.

6. (1) This section applies with respect to a project if,

- (a) the total cost of labour and materials for the project is expected to exceed,
 - (i) \$50,000, or
 - (ii) in the case of a project that is confined to a factory that manufactures or assembles automobiles, \$250,000;
- (b) the work is the erection or structural alteration of a building more than two storeys or more than 7.5 metres high;
- (c) the work is the demolition of a building at least four metres high with a floor area of at least thirty square metres;

- (d) the work is the erection, structural alteration or structural repair of a bridge, an earth-retaining structure or a water-retaining structure more than three metres high or of a silo, chimney or a similar structure more than 7.5 metres high;
 - (e) work in compressed air is to be done at the project;
 - (f) a tunnel, caisson, cofferdam or well into which a person may enter is to be constructed at the project;
 - (g) a trench into which a person may enter is to be excavated at the project and the trench is more than 300 metres long or more than 1.2 metres deep and over thirty metres long;
 - (g.1) the work is the construction, over frozen water, slush or wetlands, of an ice road for vehicles, machinery or equipment; or
 - (h) a part of the permanent or temporary work is required by this Regulation to be designed by an engineer. O. Reg. 213/91, s. 6 (1); O. Reg. 345/15, s. 2; O. Reg. 190/19, s. 1 (1).
- (2) The constructor shall comply with subsection (3) or (4) before beginning work at the project. O. Reg. 145/00, s. 4.
- (3) The constructor shall complete an approved notification form and file it at the Ministry office located nearest to the project or submit it electronically on a website of the government of Ontario. O. Reg. 145/00, s. 4; O. Reg. 242/16, s. 3.
- (4) If the constructor believes that the work at the project will not take more than 14 days, the constructor may provide the relevant information to an inspector at the Ministry office located nearest to the project,
- (a) by faxing the completed form to the inspector; or
 - (b) by providing the information that would be required to complete the form to the inspector by telephone. O. Reg. 145/00, s. 4.
- (5) Despite subsection (2), the constructor may begin work at a project before complying with subsection (3) or (4) if the following conditions are met:
1. It is necessary to do the work immediately to prevent injury to people or damage to property.
 2. Before beginning the work, the constructor gives an inspector notice of the information required in the form by telephone or fax. O. Reg. 145/00, s. 4.
- (6) The constructor shall keep the completed notification form posted

in a conspicuous place at the project or available at the project for review by an inspector. O. Reg. 145/00, s. 4.

(7) In this section,

“automobile” includes a van or truck with a gross vehicle weight rating of 14,000 pounds (6,350 kilograms) or less. O. Reg. 190/19, s. 1 (2).

7. If section 6 does not apply to a project but the project includes work on a trench more than 1.2 metres deep into which a worker may enter, the constructor shall, before any work at the project is begun, give notice in person, by telephone or by fax to the Ministry office located nearest to the project. O. Reg. 145/00, s. 5.

7.1 (1) This section applies with respect to a project at which a suspended work platform system is to be used. O. Reg. 242/16, s. 4.

(2) At least 48 hours before a suspended work platform system is used for the first time at a project, the constructor shall complete an approved notification form and provide it to the Ministry by faxing it or delivering it in person to the Ministry office located nearest to the project or submitting it electronically on a website of the government of Ontario. O. Reg. 242/16, s. 4.

(3) Despite subsection (2), the constructor may put a suspended work platform system into use before providing the approved notification form if the following conditions are met:

1. It is necessary to use the suspended work platform system immediately to prevent injury to people or damage to property.
2. Before using the suspended work platform system, the constructor gives an inspector at the Ministry office located nearest to the project oral notice, by telephone or in person, that the system will be used. O. Reg. 242/16, s. 4.

(4) If a constructor uses a suspended work platform system under subsection (3), the constructor shall, within 24 hours of beginning to use the suspended work platform system, provide a completed approved notification form to the Ministry in a manner described in subsection (2). O. Reg. 242/16, s. 4.

(5) The constructor shall keep a copy of the completed notification form in a conspicuous location at the project. O. Reg. 242/16, s. 4.

8.-12 REVOKED: O. Reg. 426/21, s. 1.

GENERAL REQUIREMENTS

13. (1) A constructor shall post in a conspicuous place at a project and

keep posted while work is done at the project a notice setting out,

- (a) the constructor's name and if the constructor carries on business in a different name, the business name;
- (b) the address and telephone number of the constructor's head office or principal place of business in Ontario; and
- (c) the address and telephone number of the nearest office of the Ministry. O. Reg. 213/91, s. 13 (1); O. Reg. 145/00, s. 9.

(2) Within forty-eight hours after a health and safety representative or joint health and safety committee members are selected for a project, a constructor shall add to the notice the name, trade and employer of the health and safety representative or of each of the committee members. O. Reg. 213/91, s. 13 (2).

14. (1) A constructor shall appoint a supervisor for every project at which five or more workers will work at the same time. O. Reg. 213/91, s. 14 (1).

(2) The supervisor shall supervise the work at all times either personally or by having an assistant, who is a competent person, do so personally. O. Reg. 213/91, s. 14 (2).

(3) A supervisor or a competent person appointed by the supervisor shall inspect all machinery and equipment, including fire extinguishing equipment, magazines, electrical installations, communication systems, sanitation and medical facilities, buildings and other structures, temporary supports and means of access and egress at the project to ensure that they do not endanger any worker. O. Reg. 213/91, s. 14 (3).

(4) An inspection shall be made at least once a week or more frequently as the supervisor determines is necessary in order to ensure that the machinery and equipment referred to in subsection (3) do not endanger any worker. O. Reg. 213/91, s. 14 (4).

(5) A competent person shall perform tests and observations necessary for the detection of hazardous conditions on a project. O. Reg. 213/91, s. 14 (5).

15. (1) An employer of five or more workers on a project shall appoint a supervisor for the workers. O. Reg. 213/91, s. 15.

(2) The supervisor shall supervise the work at all times either personally or by having an assistant, who is a competent person, do so personally. O. Reg. 145/00, s. 10.

16. At a project, no person younger than 16 years of age shall,

- (a) be employed in or about the workplace; or
- (b) be permitted to be present in or about the workplace while work is being performed. O. Reg. 145/00, s. 11.

17. (1) A constructor shall establish for a project written procedures to be followed in the event of an emergency and shall ensure that the procedures are followed at the project. O. Reg. 145/00, s. 11.

(2) The constructor shall review the emergency procedures with the joint health and safety committee or the health and safety representative for the project, if any. O. Reg. 145/00, s. 11.

(3) The constructor shall ensure that the emergency procedures are posted in a conspicuous place at the project. O. Reg. 145/00, s. 11.

18. The constructor shall ensure that every worker at the project has ready access to a telephone, two-way radio or other system of two-way communication in the event of an emergency. O. Reg. 145/00, s. 11.

19. If, under this Regulation, a record is required to be kept available for inspection at a project, the constructor or employer, as the case may be, shall keep the record for at least one year after the project is finished. O. Reg. 213/91, s. 19.

PART II

GENERAL CONSTRUCTION

APPLICATION

20. This Part applies with respect to all projects. O. Reg. 213/91, s. 20.

PROTECTIVE CLOTHING, EQUIPMENT AND DEVICES

21. (1) A worker shall wear such protective clothing and use such personal protective equipment or devices as are necessary to protect the worker against the hazards to which the worker may be exposed. O. Reg. 213/91, s. 21 (1).

(2) A worker's employer shall require the worker to comply with subsection (1). O. Reg. 213/91, s. 21 (2).

(3) A worker required to wear protective clothing or use personal protective equipment or devices shall be adequately instructed and trained in the care and use of the clothing, equipment or device before wearing or using it. O. Reg. 213/91, s. 21 (3).

(4) Personal protective clothing and equipment that is provided, worn or used shall be a proper fit, having regard to all relevant factors including

body types. O. Reg. 61/23, s. 1.

22. (1) Every worker shall wear protective headwear at all times when on a project. O. Reg. 213/91, s. 22 (1).

(2) Protective headwear shall be a safety hat that,

- (a) consists of a shell and suspension that is adequate to protect a person's head against impact and against flying or falling small objects; and
- (b) has a shell which can withstand a dielectric strength test at 20,000 volts phase to ground. O. Reg. 213/91, s. 22 (2).

23. (1) Every worker shall wear protective footwear at all times when on a project. O. Reg. 213/91, s. 23 (1).

(2) Protective footwear shall be a safety shoe or safety boot,

- (a) with a box toe that is adequate to protect the wearer's toes against injury due to impact and is capable of resisting at least 125 joules impact; and
- (b) with a sole or insole that is adequate to protect the wearer's feet against injury due to puncture and is capable of resisting a penetration load of 1.2 kilonewtons when tested with a Deutsche Industrie Norm standard pin. O. Reg. 213/91, s. 23 (2); O. Reg. 345/15, s. 3.

24. A worker shall use protection appropriate in the circumstances when there is a risk of eye injury to the worker. O. Reg. 213/91, s. 24.

25. A worker shall use protection appropriate in the circumstances when there is a risk of injury on a project from contact between the worker's skin and,

- (a) a noxious gas, liquid, fume or dust;
- (b) an object that may puncture, cut or abrade the skin;
- (c) a hot object, hot liquid or molten metal; or
- (d) radiant heat. O. Reg. 213/91, s. 25.

26. Sections 26.1 to 26.9 apply where a worker may be exposed to any of the following hazards:

1. Falling more than 3 metres.
2. Falling more than 1.2 metres, if the work area is used as a path for a wheelbarrow or similar equipment.

3. Falling into operating machinery.
4. Falling into water or another liquid.
5. Falling into or onto a hazardous substance or object.
6. Falling through an opening on a work surface. O. Reg. 145/00, s. 12; O. Reg. 85/04, s. 4; O. Reg. 345/15, s. 4.

26.1 (1) A worker shall be adequately protected by a guardrail system that meets the requirements of subsections 26.3 (2) to (8). O. Reg. 145/00, s. 12.

(2) Despite subsection (1), if it is not practicable to install a guardrail system as that subsection requires, a worker shall be adequately protected by the highest ranked method that is practicable from the following ranking of fall protection methods:

1. A travel restraint system that meets the requirements of section 26.4.
2. A fall restricting system that meets the requirements of section 26.5.
3. A fall arrest system, other than a fall restricting system designed for use in wood pole climbing, that meets the requirements of section 26.6.
4. A safety net that meets the requirements of section 26.8. O. Reg. 145/00, s. 12; O. Reg. 85/04, s. 5 (1); O. Reg. 345/15, s. 5 (1).

(3) The components of any system listed in subsection (2) shall be designed by an engineer in accordance with good engineering practice, and shall meet the requirements of any of the following National Standards of Canada standards that are applicable:

1. CAN/CSA-Z259.1-05: Body Belts and Saddles for Work Positioning and Travel Restraint.
2. CAN/CSA-Z259.2.5-12: Fall Arresters and Vertical Lifelines.
3. CAN/CSA-Z259.2.2-98 (R2004): Self-Retracting Devices for Personal Fall-Arrest Systems.
4. CAN/CSA-Z259.2.3-99 (R2004): Descent Control Devices.
5. CAN/CSA-Z259.10-06: Full Body Harnesses.
6. CAN/CSA-Z259.11-05: Energy Absorbers and Lanyards.
7. CAN/CSA-Z259.12-01 (R2006): Connecting Components for Personal Fall Arrest Systems (PFAS).

8. CAN/CSA-Z259.14-01 (R2007): Fall Restrict Equipment for Wood Pole Climbing. O. Reg. 85/04, s. 5 (2); O. Reg. 443/09, s. 1; O. Reg. 345/15, s. 5 (2).

(4) Before any use of a fall arrest system or a safety net by a worker at a project, the worker's employer shall develop written procedures for rescuing the worker after his or her fall has been arrested. O. Reg. 145/00, s. 12.

26.2 (1) An employer shall ensure that a worker who may use a fall protection system is adequately trained in its use and given adequate oral and written instructions by a competent person. O. Reg. 145/00, s. 13.

(1.1) In addition to the requirements of subsection (1), an employer shall ensure that a worker who may use a fall protection system meets the working at heights training requirements of Ontario Regulation 297/13 (Occupational Health and Safety Awareness and Training). O. Reg. 252/14, s. 1.

(2) The employer shall ensure that the person who provides the training and instruction referred to in subsection (1) prepares a written training and instruction record for each worker and signs the record. O. Reg. 145/00, s. 13.

(3) The training and instruction record shall include the worker's name and the dates on which training and instruction took place. O. Reg. 145/00, s. 13.

(4) The employer shall make the training and instruction record for each worker available to an inspector on request. O. Reg. 145/00, s. 13.

26.3 (1) Despite paragraph 1 of section 26, a guardrail system that meets the requirements of this section shall be used if a worker has access to the perimeter or an open side of any of the following work surfaces and may be exposed to a fall of 2.4 metres or more:

1. A floor, including the floor of a mezzanine or balcony.
2. The surface of a bridge.
3. A roof while formwork is in place.
4. A scaffold platform or other work platform, runway or ramp. O. Reg. 145/00, s. 14; O. Reg. 345/15, s. 6.

(2) One of the following precautions shall be used to prevent a worker from falling through an opening on a work surface:

1. A guardrail system that meets the requirements of this section.
2. A protective covering that,

- i. completely covers the opening,
- ii. is securely fastened,
- iii. is adequately identified as covering an opening,
- iv. is made from material adequate to support all loads to which the covering may be subjected, and
- v. is capable of supporting a live load of at least 2.4 kilonewtons per square metre without exceeding the allowable unit stresses for the material used. O. Reg. 145/00, s. 14.

(3) The guardrail system or protective covering required under subsection (1) or (2) may be removed temporarily to perform work in or around the opening if a worker is adequately protected and signs are posted in accordance with subsections 44 (1) and (2). O. Reg. 145/00, s. 14.

(4) The following are the specifications for a guardrail system:

1. It shall have a top rail, an intermediate rail and a toe board.
2. The intermediate rail may be replaced by material that can withstand a point load of 450 newtons applied in a lateral or vertical downward direction.
3. Subject to subsection 116 (8), the top of the guardrail system shall be located at least 0.9 metres but not more than 1.1 metres above the surface on which the system is installed.
4. The intermediate rail shall be located midway between the top rail and the toe board.
- 4.1 The toe board shall extend from the surface to which the guardrail system is attached to a height of at least 89 millimetres.
5. If the guardrail system is located at the perimeter of a work surface, the distance between the edge of the surface and the guardrail system shall not be greater than 300 millimetres. O. Reg. 145/00, s. 14; O. Reg. 443/09, s. 2 (1).

(5) A guardrail system shall be capable of resisting anywhere along the length of the system the following loads when applied separately, without exceeding the allowable unit stress for each material used:

1. A point load of 675 newtons applied in a lateral direction to the top rail.
2. A point load of 450 newtons applied in a vertical downward direction to the top rail.

3. A point load of 450 newtons applied in a lateral or vertical downward direction to the intermediate rail, or midway between the top rail and the toe board.
4. A point load of 225 newtons applied in a lateral direction to the toe board. O. Reg. 145/00, s. 14.

(6) The distance between any two adjacent posts of the guardrail system may be greater than 2.4 metres only if the system is capable of resisting the loads specified in subsection (5) increased in proportion to the greater distance between the posts. O. Reg. 443/09, s. 2 (2).

(7) The following additional requirements apply to a guardrail system that is made of wood:

1. The wood shall be spruce, pine or fir (S-P-F) timber of construction grade quality or better and shall not have any visible defect affecting its load-carrying capacity.
2. The wood shall be free of sharp objects such as splinters and protruding nails.
3. The system shall have posts that are at least 38 millimetres by 89 millimetres, are securely fastened to the surface and are spaced at intervals of not more than 2.4 metres.
4. The top rail and the intermediate rail shall each be at least 38 millimetres by 89 millimetres. O. Reg. 145/00, s. 14; O. Reg. 443/09, s. 2 (3).

(7.1) If a guardrail system that is made of wood is constructed and installed so that it is capable of resisting all loads that it may be subjected to by a worker, the following do not apply:

1. The requirement in paragraph 2 of subsection (4) that the replacement material can withstand a point load of 450 newtons.
2. Subsections (5) and (6). O. Reg. 443/09, s. 2 (4).

(8) The following additional requirements apply to a guardrail system that is made of wire rope:

1. The top rail and intermediate rail shall be made of wire rope that is at least 10 millimetres in diameter, and the rope shall be kept taut by a turnbuckle or other device.
2. The outward deflection of the top rail and intermediate rail resulting from the loads specified in subsection (5) shall not extend beyond the edge of a work surface.

3. The system shall have vertical separators at intervals of not more than 2.4 metres and horizontal supports at intervals of not more than 9 metres.

4. REVOKED: O. Reg. 443/09, s. 2 (6).

O. Reg. 145/00, s. 14; O. Reg. 443/09, s. 2 (5, 6).

26.4 (1) A travel restraint system shall consist of a full body harness with adequate attachment points or a safety belt. O. Reg. 145/00, s. 14.

(2) The full body harness or safety belt shall be attached by a lifeline or lanyard to a fixed support that meets the requirements of section 26.7. O. Reg. 145/00, s. 14.

(3) The travel restraint system shall be inspected by a competent worker before each use. O. Reg. 145/00, s. 14.

(4) If a component of the travel restraint system is found to be defective on inspection, the defective component shall immediately be taken out of service. O. Reg. 145/00, s. 14.

26.5 (1) A fall restricting system that is not designed for use in wood pole climbing shall consist of an assembly of components that is,

- (a) attached to an independent fixed support that meets the requirements of section 26.7; and
- (b) designed and arranged in accordance with the manufacturer's instructions and so that a worker's free fall distance does not exceed 0.6 metres. O. Reg. 85/04, s. 6.

(2) A fall restricting system that is designed for use in wood pole climbing,

- (a) shall consist of an assembly of components that is designed and arranged in accordance with the manufacturer's instructions; and
- (b) shall not allow pole slippage in excess of the distances set out in the applicable National Standards of Canada standard referred to in subsection 26.1 (3). O. Reg. 85/04, s. 6.

(3) A fall restricting system shall be inspected by a competent worker before each use. O. Reg. 85/04, s. 6.

(4) If a component of the fall restricting system is found to be defective on inspection, the component shall be taken out of service immediately. O. Reg. 85/04, s. 6.

(5) If a worker who is using the fall restricting system falls or slips more than the distance determined under clause (1) (b) or (2) (b), as the case

may be, the system shall be taken out of service immediately and shall not be used again by a worker unless all components of the system have been certified by the manufacturer as being safe for reuse. O. Reg. 85/04, s. 6.

26.6 (1) A fall arrest system shall consist of a full body harness with adequate attachment points and a lanyard equipped with a shock absorber or similar device. O. Reg. 145/00, s. 14.

(2) The fall arrest system shall be attached by a lifeline or by the lanyard to an independent fixed support that meets the requirements of section 26.7. O. Reg. 145/00, s. 14.

(3) The fall arrest system shall be arranged so that a worker cannot hit the ground or an object or level below the work. O. Reg. 145/00, s. 14.

(4) Despite subsection (1), the fall arrest system shall not include a shock absorber if wearing or using one could cause a worker to hit the ground or an object or level below the work. O. Reg. 145/00, s. 14.

(5) The fall arrest system shall not subject a worker who falls to a peak fall arrest force greater than 8 kilonewtons. O. Reg. 145/00, s. 14.

(6) The fall arrest system shall be inspected by a competent worker before each use. O. Reg. 145/00, s. 14.

(7) If a component of the fall arrest system is found to be defective on inspection, the defective component shall immediately be taken out of service. O. Reg. 145/00, s. 14.

(8) If a worker who is using the fall arrest system falls, the system shall be immediately removed from service and shall not be used again by a worker unless all components of the system have been certified by the manufacturer as being safe for re-use. O. Reg. 145/00, s. 14.

(9) Subsections (1) to (8) do not apply to fall restricting systems designed for use in wood pole climbing. O. Reg. 85/04, s. 7.

26.7 (1) A permanent anchor system shall be used as the fixed support in a fall arrest system, fall restricting system or travel restraint system if the following conditions are met:

1. The anchor system has been installed according to the Building Code.
2. It is safe and practical to use the anchor system as the fixed support. O. Reg. 145/00, s. 14.

(2) If the conditions set out in subsection (1) are not met, a temporary fixed support shall be used that meets the following requirements:

1. Subject to paragraph 2, a support used in a fall arrest system shall be capable of supporting a static force of at least 8 kilonewtons without exceeding the allowable unit stress for each material used.
2. If a shock absorber is also used in the fall arrest system, the support shall be capable of supporting a static force of at least 6 kilonewtons without exceeding the allowable unit stress for each material used.
3. Subject to paragraph 4, a support used in a fall restricting system must be capable of supporting a static force of at least 6 kilonewtons without exceeding the allowable unit stress for each material used.
4. Paragraph 3 does not apply to a support that is used in accordance with the manufacturer's written instructions and is adequate to protect a worker.
5. A support used in a travel restraint system shall be capable of supporting a static force of at least 2 kilonewtons without exceeding the allowable unit stress for each material used. O. Reg. 145/00, s. 14.

(3) Despite the requirements listed in subsection (2), the support capacity of a temporary fixed support used in a fall protection system may be determined by dynamic testing in accordance with good engineering practice to ensure that the temporary fixed support has adequate capacity to arrest a worker's fall. O. Reg. 145/00, s. 14.

(4) A fixed support shall not have any sharp edges that could cut, chafe or abrade the connection between it and another component of the system. O. Reg. 145/00, s. 14.

(5) Subsections (1) to (4) do not apply to fall restricting systems designed for use in wood pole climbing. O. Reg. 85/04, s. 8.

26.8 (1) A safety net shall be designed, tested and installed in accordance with ANSI/ASSE Standard A10.11-2010, Safety Requirements for Personnel and Debris Nets. O. Reg. 145/00, s. 14; O. Reg. 345/15, s. 7.

(2) The safety net shall be installed by a competent worker. O. Reg. 145/00, s. 14.

(3) An engineer or a competent person under the engineer's supervision shall inspect and test the installation of the safety net before it is put in service. O. Reg. 145/00, s. 14.

(4) The engineer shall document the inspection and testing of the safety net. O. Reg. 145/00, s. 14; O. Reg. 85/04, s. 9.

(5) A copy of the document shall be kept at the project while the safety net is in service. O. Reg. 145/00, s. 14.

26.9 (1) This section applies to a lanyard or lifeline that is part of a travel restraint system or a fall arrest system. O. Reg. 145/00, s. 14.

(2) The following requirements apply to a lanyard or a lifeline:

1. It shall not be used in such a way that it is likely to be cut, chafed or abraded.
2. It shall not be subjected to extreme temperature, flame, abrasive or corrosive materials or other hazards that may damage it.
3. The free end of the lanyard or lifeline shall be kept clear of equipment and machinery. O. Reg. 145/00, s. 14.

(3) Only one person at a time may use a lanyard. O. Reg. 145/00, s. 14.

(4) The connecting ends of a lanyard shall be wrapped around a protective thimble and adequately fastened with a swaged fitting or eye splice supplied by the manufacturer of the lanyard. O. Reg. 145/00, s. 14; O. Reg. 242/16, s. 5.

(5) A horizontal or vertical lifeline shall be kept free from splices or knots, except knots used to connect it to a fixed support. O. Reg. 145/00, s. 14.

(6) Only one person at a time may use a vertical lifeline. O. Reg. 145/00, s. 14.

(7) A vertical lifeline shall,

- (a) extend to the ground; or
- (b) have a positive stop that prevents the rope grab or other similar device from running off the end of the lifeline. O. Reg. 145/00, s. 14.

(8) The following requirements apply to a horizontal lifeline system:

1. It shall be designed by an engineer in accordance with good engineering practice.
2. The design may be a standard design or a custom design.
3. The design shall,
 - i. show the arrangement of the system including the anchorage or fixed support system,
 - ii. indicate the components used,
 - iii. state the number of workers that can safely be attached to it,
 - iv. set out instructions for installation or erection, and

v. show the design loads for the system.

4. The system shall be installed or erected, and maintained, in accordance with the engineer's design.
5. Before each use, the system shall be inspected by an engineer or a competent worker designated by a supervisor.
6. The constructor shall keep the design at the project while the system is in use. O. Reg. 145/00, s. 14.

26.10, 26.11 REVOKED: O. Reg. 85/04, s. 10.

27. (1) Despite subsections 26.1 (1) and (2), if the following conditions are met, a worker shall wear a lifejacket or other personal flotation device that is adequate:

1. The worker is exposed to a risk of drowning on a project.
2. It is not reasonably possible to install a guardrail system as subsection 26.1 (1) requires.
3. It is not reasonably possible to protect the worker adequately by means of a fall protection method as subsection 26.1 (2) requires. O. Reg. 443/09, s. 3 (1).

(2) If a worker may drown at a project,

- (a) at least two workers trained to perform rescue operations shall be available to perform rescue operations;
- (b) rescue equipment shall be provided in a suitable location on or near the project; and
- (c) all workers on the project shall be advised of the rescue procedures to be followed and their role, if any, in carrying out a rescue. O. Reg. 213/91, s. 27 (2).

(3) The rescue equipment shall include,

- (a) a seaworthy boat equipped with a lifebuoy attached to a buoyant heaving line not less than 15 metres in length and a boat hook; and
- (b) REVOKED: O. Reg. 443/09, s. 3 (2).
- (c) an alarm system capable of warning a worker of the necessity of carrying out a rescue operation. O. Reg. 213/91, s. 27 (3); O. Reg. 443/09, s. 3 (2).

(4) The boat shall be power-driven if the water is likely to be rough or swift. O. Reg. 213/91, s. 27 (4).

(5) The alarm system shall be activated when a rescue operation is necessary. O. Reg. 213/91, s. 27 (5).

(6) REVOKED: O. Reg. 443/09, s. 3 (3).

HYGIENE

28. (1) A reasonable supply of potable drinking water shall be kept readily accessible at a project for the use of workers. O. Reg. 213/91, s. 28 (1).

(2) Drinking water shall be supplied from a piping system or from a clean, covered container with a drain faucet. O. Reg. 213/91, s. 28 (2).

(3) Workers shall be given a sanitary means of drinking the drinking water. O. Reg. 213/91, s. 28 (3).

(4) Workers shall not be required to share a common drinking cup to drink water. O. Reg. 213/91, s. 28 (4).

29. (1) In this section,

“facilities” means toilet, urinal and clean-up facilities; (“installations”)

“service”, when used as a verb, means to have waste pumped out and to have the facilities replenished where necessary. (“entretenir”) O. Reg. 527/00, s. 1.

(2) REVOKED: O. Reg. 527/00, s. 1.

(3) The constructor shall ensure,

(a) that facilities are provided or arranged for workers before work has started at a project; and

(b) that workers at the project have reasonable access to these facilities. O. Reg. 145/00, s. 15.

(4) Subject to subsections (5) and (6), the facilities shall be located not more than 90 metres, where reasonably possible, and otherwise not more than 180 metres, measured horizontally, from the project work area. O. Reg. 61/23, s. 2 (1).

(5) If work is being performed in a tunnel, the facilities shall be located not more than 180 metres, measured horizontally, from the entrance to the tunnel. O. Reg. 142/17, s. 6.

(6) The facilities may be located not more than 3 kilometres from the work area if transportation to the facilities is provided for workers where reasonably required. O. Reg. 142/17, s. 6.

(7) If the project is the construction of a building, the facility shall be

located not more than 9 metres, measured vertically, from the level at which work is being performed, in addition to meeting the requirement set out in subsection (4). O. Reg. 142/17, s. 6.

(8) The location of the facilities under subsection (7) may be varied if the arrangement affords reasonable accessibility for workers. O. Reg. 145/00, s. 15.

(9) If the location of the facilities is varied under subsection (8), the constructor shall document in writing the location and the reasons for the variance, and shall provide the document to,

- (a) the joint health and safety committee or the health and safety representative, if any, for the workplace; or
- (b) the workers, if there is no committee or representative for the workers. O. Reg. 145/00, s. 15.

(10) The constructor shall,

- (a) inform workers of the location of the facilities; and
- (b) post the location of the facilities in a conspicuous place at the project if it is practical to do so. O. Reg. 145/00, s. 15.

(11) The facilities shall be serviced, cleaned and sanitized as frequently as necessary to maintain them in a clean and sanitary condition. O. Reg. 145/00, s. 15.

(11.1) The facilities shall be kept in good repair at all times. O. Reg. 61/23, s. 2 (2).

(12) The constructor shall keep at the project for the duration of the project,

- (a) a record of the servicing, cleaning and sanitizing of the facilities; and
- (b) a copy of the document required under subsection (9), if any. O. Reg. 145/00, s. 15.

(13) Facilities that are not under the constructor's control satisfy the requirements of this section only if the constructor has received permission from the facilities' owner for workers to use the facilities. O. Reg. 145/00, s. 15.

29.1 (0.1) In this section,

"non-sewered flush toilet facilities" means water flush toilets or chemical flush toilets that have the features listed in subsection (0.2); ("installations de toilettes à chasse non raccordées à un réseau

d'égouts")

"sewered toilet facilities" means water flush toilets that are connected to a sanitary sewer system and equipped with a trap in accordance with the applicable provisions of the Building Code. ("installations de toilettes raccordées à un réseau d'égouts") O. Reg. 527/00, s. 2 (1); O. Reg. 142/17, s. 7.

(0.2) The features referred to in the definition of "non-sewered flush toilet facilities" in subsection (0.1) are:

1. The toilets are not connected to a sanitary sewer system.
2. They are equipped with a trap or a positive seal separating stored waste from the bowl.
3. The waste is first flushed from the bowl with water or with water containing chemical additives. Then the waste is deposited into a container and chemically treated sufficiently for the container's maximum capacity. O. Reg. 527/00, s. 2 (1).

(1) Each toilet facility shall meet the following requirements:

1. The facility shall have,
 - i. a toilet with an open-front toilet seat,
 - ii. a toilet paper holder and an adequate supply of toilet paper, and
 - iii. a self-closing door that can be locked from the inside.
2. The facility shall,
 - i. be adequately illuminated by natural or artificial light,
 - ii. be adequately heated, if that is possible,
 - iii. be adequately ventilated, and
 - iv. afford the user privacy and protection from weather and falling objects.
3. If the facility is a single-toilet facility, it shall be completely enclosed. O. Reg. 61/23, s. 3 (1).

(1.1) For greater certainty, the requirement that a facility be completely enclosed does not apply to a portable urinal. O. Reg. 61/23, s. 3 (1).

(2) Separate toilet facilities shall be provided for male and female workers, unless the facilities are intended to be used by only one worker at a time. O. Reg. 145/00, s. 15.

(2.1) Where the minimum number of toilets required at a project under subsection (5) or (7) is five or more, at least one facility at the project shall be for the use of female workers only, where reasonable in the circumstances. O. Reg. 61/23, s. 3 (2).

(2.2) If the facility is intended for use by males only or females only, it shall have a sign indicating that. O. Reg. 61/23, s. 3 (2).

(2.3) If the facility is intended for use by female workers, there shall be a disposal receptacle for sanitary napkins. O. Reg. 61/23, s. 3 (2).

(3) Sewered toilet facilities or non-sewered flush toilet facilities shall be provided at a project, subject to subsection (4). O. Reg. 145/00, s. 15.

(4) If a project is being carried out in a remote unpopulated area and it is not reasonably possible to provide toilet facilities required under subsection (3), other types of toilet facilities shall be provided. O. Reg. 61/23, s. 3 (3).

(5) When water flush toilets or non-recirculating chemical flush toilets are provided, the minimum number of toilets required at the project is as follows:

TABLE

Item	Column 1 Minimum number of toilets	Column 2 Number of workers regularly employed at the project
1.	1	1-15
2.	2	16-30
3.	3	31-45
4.	4	46-60
5.	4, plus 1 additional toilet for each additional group of 15 or fewer workers	61 or more

O. Reg. 145/00, s. 15; O. Reg. 527/00, s. 2 (5); O. Reg. 345/15, s. 8 (1).

(6) If the toilets are located in a multiple water flush toilet facility and are intended to be used by male workers, water flush urinals may be substituted for a maximum of two-thirds of the number of toilets required by subsection (5). O. Reg. 145/00, s. 15.

(7) When toilets other than water flush toilets or non-recirculating chemical flush toilets are provided, the minimum number of toilets required at the project is as follows:

TABLE

Item	Column 1 Minimum number of toilets	Column 2 Number of workers regularly employed at the project
1.	1	1-10
2.	2	11-20
3.	3	21-30
4.	4	31-40
5.	4, plus 1 additional toilet for each additional group of 15 or fewer workers	41 or more

O. Reg. 145/00, s. 15; O. Reg. 527/00, s. 2 (6); O. Reg. 345/15, s. 8 (2).

(8) If the toilets are located in a portable single-unit toilet facility intended for use by male workers, there shall be at least one urinal for each toilet. O. Reg. 145/00, s. 15.

(9) Portable urinals equipped with clean-up facilities are permitted in addition to the requirements of this section. O. Reg. 145/00, s. 15.

29.2 (1) Subject to subsection (1.0.1), each single-toilet facility shall be provided with its own clean-up facility. O. Reg. 61/23, s. 4 (1).

(1.0.1) One readily accessible clean-up facility may be provided for every two single-toilet facilities if those single-toilet facilities are located together in the same area at the project. O. Reg. 61/23, s. 4 (1).

(1.1) In a multiple-toilet facility at a project, one clean-up facility shall be provided for every two toilets. O. Reg. 527/00, s. 3.

(2) Each clean-up facility shall meet the following requirements:

1. Subject to subsection (3), the facility shall have a wash basin with running water. Both hot and cold running water shall be available if reasonably possible.
2. Soap or hand cleanser shall be provided.
3. Paper towels or a hand dryer shall be provided. If paper towels are provided, there shall be a waste disposal receptacle nearby. O. Reg. 145/00, s. 15.

(3) If it is not reasonably possible to have a wash basin with running water at a clean-up facility, both of the following shall be provided:

1. A means of cleaning hands.
2. An alcohol-based hand sanitizer containing a minimum of 60 per cent alcohol. O. Reg. 61/23, s. 4 (2).

30. Workers who handle or use corrosive, poisonous or other substances likely to endanger their health shall be provided with washing

facilities with clean water, soap and individual towels. O. Reg. 213/91, s. 30.

GENERAL REQUIREMENTS

- 31.** (1) Every part of a project, including a temporary structure,
- (a) shall be designed and constructed to support or resist all loads and forces to which it is likely to be subjected without exceeding the allowable unit stress for each material used; and
 - (b) shall be adequately braced to prevent any movement that may affect its stability or cause its failure or collapse. O. Reg. 213/91, s. 31 (1).
- (2) If two structural steel columns or structural steel beams are connected to a common column or common beam,
- (a) the connection shall be made using a clipped double connection; or
 - (b) the first column or beam shall be secured in a seated connection. O. Reg. 213/91, s. 31 (2).
- (3) No part of a project, including a temporary structure, shall be subjected to a load in excess of the load it is designed and constructed to bear. O. Reg. 213/91, s. 31 (3).
- 32.** (1) During the construction of a building, temporary or permanent flooring shall be installed progressively as the building is erected. O. Reg. 213/91, s. 32 (1).
- (2) Temporary flooring,
- (a) shall consist of material that, without exceeding the allowable unit stress for the material used, is capable of supporting,
 - (i) any load to which it is likely to be subjected, and
 - (ii) a load of at least 2.4 kilonewtons per square metre;
 - (b) shall be securely fastened to and supported on girders, beams or other structural members that are capable of supporting any load likely to be applied to the flooring without exceeding the allowable unit stress for the structural members; and
 - (c) shall extend over the whole area of the surface on or above which work is being carried out. O. Reg. 213/91, s. 32 (2).
- (3) Temporary flooring shall not be subjected to a load in excess of the load that it is designed and constructed to bear. O. Reg. 213/91, s. 32 (3).

33. (1) Subject to subsection (2), work on a building shall not be carried out at a distance higher than the higher of two storeys or the first column splice above the temporary or permanent flooring. O. Reg. 213/91, s. 33 (1).

(2) If the vertical distance between the tiers of column splices on a building exceeds two storeys, work shall not be carried out higher than three storeys above the temporary or permanent flooring. O. Reg. 213/91, s. 33 (2).

(3) This section does not apply to work carried out by a worker,

(a) who is working from a scaffold;

(b) whose fall would be arrested by means of a safety net without endangering the worker; or

(c) who is using a fall arrest system attached to the project. O. Reg. 213/91, s. 33 (3).

34. (1) If material may fall on a worker, overhead protection shall be provided,

(a) at every means of access to and egress from a building or other structure under construction; and

(b) above every area where work is being carried out. O. Reg. 213/91, s. 34 (1).

(2) Overhead protection shall consist of material capable of supporting 2.4 kilonewtons per square metre without exceeding the allowable unit stress for the material used. O. Reg. 213/91, s. 34 (2).

HOUSEKEEPING

35. (1) Waste material and debris shall be removed to a disposal area and reusable material shall be removed to a storage area as often as is necessary to prevent a hazardous condition arising and, in any event, at least once daily. O. Reg. 213/91, s. 35 (1).

(2) Rubbish, debris and other materials shall not be permitted to fall freely from one level to another but shall be lowered by a chute, in a container or by a crane or hoist. O. Reg. 213/91, s. 35 (2).

(3) Despite subsection (2), rubbish, debris and other materials from demolition on a project may be permitted to fall or may be dropped into an enclosed designated area to which people do not have access. O. Reg. 213/91, s. 35 (3).

(4) A chute,

- (a) shall be adequately constructed and rigidly fastened in place;
 - (b) if it has a slope exceeding a gradient of one in one, shall be enclosed on its four sides;
 - (c) shall have a gate at the bottom end if one is necessary to control the flow of material; and
 - (d) shall discharge into a container or an enclosed area surrounded by barriers. O. Reg. 213/91, s. 35 (4).
- (5) The entrance to a chute,
- (a) shall be constructed to prevent spilling over when rubbish, debris and other materials are being deposited into the chute;
 - (b) if it is at or below floor level, shall have a curb that is at least 100 millimetres high;
 - (c) shall not be more than 1.2 metres high;
 - (d) shall be kept closed when the chute is not in use; and
 - (e) shall be designed so that any person will be discouraged from entering it. O. Reg. 213/91, s. 35 (5).

36. If a formwork tie, reinforcing steel, a nail or another object protruding from concrete or another surface may endanger a worker, the protrusion shall be removed, cut off at the surface or otherwise protected as soon as practicable. O. Reg. 213/91, s. 36.

37. (1) Material or equipment at a project shall be stored and moved in a manner that does not endanger a worker. O. Reg. 213/91, s. 37 (1).

(2) No material or equipment to be moved by a crane or similar hoisting device shall be stored under or in close proximity to an energized outdoor overhead electrical conductor. O. Reg. 213/91, s. 37 (2).

38. Blocking, support chains, metal bands, wire rope and rigging components shall be removed from material or equipment in a manner that does not endanger a worker. O. Reg. 213/91, s. 38.

39. Material and equipment at a project shall be piled or stacked in a manner that prevents it from tipping, collapsing or rolling. O. Reg. 213/91, s. 39.

40. (1) No material shall be stored, stacked or piled closer than 1.8 metres to,

- (a) an opening in a floor or roof; or
- (b) the open edge of a floor, roof or balcony.

(c) REVOKED: O. Reg. 241/23, s. 2(1).

(2) Subsection (1) does not apply with respect to material in a building or a completely enclosed part of a building that is used solely for storing and distributing materials. O. Reg. 213/91, s. 40 (2).

(3) Subsection (1) does not apply with respect to small masonry units including bricks, blocks and similar objects,

(a) that can be handled by one worker;

(b) that are to be used at the edge of a floor, a roof or an opening in a floor or roof; and

(c) that are stacked in a pile whose height is less than the distance from the face of the pile to the edge of the floor, roof or opening in a floor or roof. O. Reg. 213/91, s. 40 (3).

41. A combustible, corrosive or toxic substance shall be stored in a suitable container. O. Reg. 213/91, s. 41.

42. (1) A storage cylinder for compressed gas shall be secured in an upright position. O. Reg. 213/91, s. 42 (1).

(2) The control valve of a storage cylinder for compressed gas, other than a cylinder connected to a regulator, supply line or hose, shall be covered by a protective cap that is secured in its proper position. O. Reg. 213/91, s. 42 (2).

(3) A spent storage cylinder shall not be stored inside a building. O. Reg. 213/91, s. 42 (3).

(4) No storage cylinder for propane shall be placed closer than three metres to a source of ignition or fire. O. Reg. 213/91, s. 42 (4).

(5) Subsection (4) does not apply to a storage cylinder,

(a) that forms part of hand-held propane equipment;

(b) that forms part of a lead pot used in plumbing or electrical work;

(c) that forms part of a propane-powered or propane-heated vehicle;
or

(d) that is protected from a source of ignition by a barrier, wall or other means of separation. O. Reg. 213/91, s. 42 (5).

43. (1) A flammable liquid or gas shall be stored in a building or storage tank that is suitable for the purpose and, if practicable, not less than 100 metres from a magazine for explosives. O. Reg. 213/91, s. 43 (1).

(2) No more than one work day's normal supply of a flammable liquid

shall be stored in a building or structure on a project unless it is stored,

- (a) in a container that is suitable for the particular hazards of the liquid; and
- (b) in a controlled access area or a room,
 - (i) that has sufficient window area to provide explosion relief to the outside, and
 - (ii) that is remote from the means of egress from the building or structure. O. Reg. 213/91, s. 43 (2).
- (3) A portable container used to store or transport flammable liquids,
 - (a) shall be approved for use for that liquid by a recognized testing laboratory; and
 - (b) shall have a label stating the use for which the container is approved and the name of the testing laboratory which gave the approval required by clause (a). O. Reg. 213/91, s. 43 (3).

44. (1) Signs meeting the requirements of subsection (2) shall be posted in prominent locations and in sufficient numbers to warn workers of a hazard on a project. O. Reg. 213/91, s. 44 (1).

(2) A sign shall contain the word “DANGER” written in legible letters that are at least 150 millimetres in height and shall state that entry by any unauthorized person to the area where the hazard exists is forbidden. O. Reg. 213/91, s. 44 (2).

(3) Without limiting the generality of subsection (1), a sign shall be posted,

- (a) adjacent to a hoisting area;
- (b) under a boatswain’s chair or a suspended work platform;
- (c) at the outlet from a chute;
- (d) at a means of access to a place where there may be a noxious gas, vapour, dust or fume, noxious substance or a lack of oxygen; and
- (e) where there is a potential hazard from an energized overhead electrical conductor at more than 750 volts. O. Reg. 213/91, s. 44 (3); O. Reg. 242/16, s. 6; O. Reg. 142/17, s. 9.

(4) No person shall enter an area in which a sign is posted other than a worker authorized to work in the area. O. Reg. 213/91, s. 44 (4).

45. (1) The areas in which a worker is present and the means of access to and egress from those areas shall be adequately lit. O. Reg. 213/91, s.

45 (1).

(2) A light bulb used in a temporary lighting system shall be enclosed by a mechanical protection device. O. Reg. 213/91, s. 45 (2).

46. (1) A project shall be adequately ventilated by natural or mechanical means,

(a) if a worker may be injured by inhaling a noxious gas, vapour, dust or fume or from a lack of oxygen; or

(b) if a gas, vapour, dust or fume may be capable of forming an explosive mixture with air. O. Reg. 213/91, s. 46 (1).

(2) If it is not practicable to provide natural or mechanical ventilation in the circumstances described in clause (1) (a), respiratory protective equipment suitable for the hazard shall be provided to and used by the workers. O. Reg. 213/91, s. 46 (2).

47. (1) This section does not apply to an internal combustion engine operated in a tunnel. O. Reg. 345/15, s. 9.

(2) No internal combustion engine shall be operated in an excavation or in a building or other enclosed structure unless there is an adequate supply of air for combustion and,

(a) the exhaust gases and fumes from the engine are adequately discharged directly outside the excavation, building or other enclosed structure to a point sufficiently remote to prevent the return of the gases and fumes; or

(b) there is adequate natural or mechanical ventilation to ensure that exhaust gases and fumes from the engine will not accumulate in the excavation, building or other enclosed structure. O. Reg. 345/15, s. 9.

(3) An excavation or a building or other enclosed structure in which an internal combustion engine is being operated shall be tested for airborne concentrations of carbon monoxide to ensure that the concentrations do not exceed the applicable limits as determined in accordance with section 4 of Regulation 833 of the Revised Regulations of Ontario, 1990 (Control of Exposure to Biological or Chemical Agents), made under the Act. O. Reg. 345/15, s. 9.

(4) The testing under subsection (3) shall be carried out by a competent worker in accordance with a written testing strategy, which shall be developed by the employer in consultation with the joint health and safety committee or a health and safety representative, if any. O. Reg. 345/15, s. 9.

(5) An internal combustion engine under this section shall be maintained and used in accordance with section 93. O. Reg. 345/15, s. 9.

48. (1) When a drum, tank, pipeline or other container is to be repaired or altered,

- (a) its internal pressures shall be adjusted to atmospheric pressure before any fastening is removed;
- (b) it shall be drained, cleaned and ventilated or otherwise rendered free from any explosive, flammable or harmful substance; and
- (c) it shall not be refilled during repair or alteration if the substance which is to be placed in it may vaporize or ignite. O. Reg. 213/91, s. 48 (1).

(2) Clauses (1) (a) and (b) do not apply with respect to a pipeline if hot-tapping and boxing-in are carried out by a competent worker under controlled conditions that provide for the protection of all persons. O. Reg. 213/91, s. 48 (2).

TEMPORARY HEAT

49. (1) A fuel-fired heating device shall be located, protected and used in such a way that there is no risk of igniting a tarpaulin or similar temporary enclosure or combustible materials adjacent to it. O. Reg. 213/91, s. 49 (1).

(2) No fuel-fired heating device shall be used in a confined or enclosed space unless there is an adequate supply of air for combustion and adequate general ventilation. O. Reg. 213/91, s. 49 (2).

(3) A fuel-fired heating device shall be protected from damage and from overturning. O. Reg. 213/91, s. 49 (3).

(4) No fuel-fired heating device shall be located so as to restrict any means of egress. O. Reg. 213/91, s. 49 (4).

(5) A fuel-fired heating device that generates noxious products of combustion shall discharge the products of combustion outside the building or structure in which it is located. O. Reg. 213/91, s. 49 (5).

50. All fuel supply lines shall be constructed, guarded or placed in such a way as to be protected from damage. O. Reg. 213/91, s. 50.

51. (1) Temporary steam-piping shall be installed and supported so as not to endanger a worker. O. Reg. 213/91, s. 51 (1).

(2) Temporary steam-piping shall be insulated or otherwise protected if a worker is likely to come into contact with it. O. Reg. 213/91, s. 51 (2).

FIRE SAFETY

52. (1) Fire extinguishing equipment shall be provided at readily accessible and adequately marked locations at a project. O. Reg. 213/91, s. 52 (1).

(1.1) Every worker who may be required to use fire extinguishing equipment shall be trained in its use. O. Reg. 145/00, s. 16.

(2) Without limiting subsection (1), at least one fire extinguisher shall be provided,

- (a) where flammable liquids or combustible materials are stored, handled or used;
- (b) where oil-fired or gas-fired equipment, other than permanent furnace equipment in a building, is used;
- (c) where welding or open-flame operations are carried on; and
- (d) on each storey of an enclosed building being constructed or altered. O. Reg. 213/91, s. 52 (2).

(3) At least one fire extinguisher shall be provided in a workshop for each 300 or fewer square metres of floor area. O. Reg. 213/91, s. 52 (3).

(4) Clause (2) (d) and subsection (3) do not apply to a building,

- (a) that is to be used as a detached or semi-detached single-family dwelling;
- (b) that has two storeys or less and is to be used as a multiple family dwelling; or
- (c) that has one storey with no basement or cellar. O. Reg. 213/91, s. 52 (4).

53. (1) Fire extinguishing equipment shall be of a suitable type and size to permit the evacuation of workers during a fire. O. Reg. 213/91, s. 53 (1).

(2) Every fire extinguisher,

- (a) shall be a type whose contents are discharged under pressure; and
- (b) shall have an Underwriters' Laboratories of Canada rating of at least 4A40BC. O. Reg. 213/91, s. 53 (2); O. Reg. 345/15, s. 10.

54. (1) Fire extinguishing equipment shall be protected from physical damage and from freezing. O. Reg. 213/91, s. 54 (1).

(2) After a fire extinguisher is used, it shall be refilled or replaced immediately. O. Reg. 213/91, s. 54 (2).

55. Every fire extinguisher shall be inspected for defects or deterioration at least once a month by a competent worker who shall record the date of the inspection on a tag attached to it. O. Reg. 213/91, s. 55.

56. No work shall be carried out at a height of 84 metres or more in a building unless the building has temporary or permanent fire pumps that provide a minimum water flow of 1,890 litres per minute at a discharge pressure of at least 450 kilopascals at and above the 84-metre height. O. Reg. 145/00, s. 17.

57. (1) As construction proceeds in a building with two or more storeys, a permanent or temporary standpipe shall be installed such that the distance between the standpipe and the uppermost work level is no more than two storeys at any given time. O. Reg. 142/17, s. 10.

(2) Subsection (1) does not apply to work carried out in a building which is not required by the Building Code to have a permanent standpipe. O. Reg. 213/91, s. 57 (2).

(3) A permanent standpipe,

- (a) shall have sufficient hose outlets to permit every part of the building to be protected by a hose not longer than twenty-three metres;
- (b) shall have a connection for the use of the local fire department located on the street side of the building not more than 900 millimetres and not less than 300 millimetres above ground level and to which there is clear access at all times; and
- (c) shall be maintained so as to be readily operable if required to be used. O. Reg. 213/91, s. 57 (3).

(4) Every hose outlet in a permanent standpipe shall have a valve. O. Reg. 213/91, s. 57 (4).

(5) Every hose used with a permanent standpipe,

- (a) shall be at least thirty-eight millimetres in diameter;
- (b) shall have a combination straight stream and fog nozzle; and
- (c) shall be stored on a rack in such a way as to protect it from damage and keep it available for immediate use. O. Reg. 213/91, s. 57 (5).

(6) If a temporary standpipe has been installed, it shall not be disconnected until the permanent standpipe is connected, so that there is always a standpipe in service. O. Reg. 145/00, s. 18 (2).

(7) A temporary standpipe shall be maintained so that it is readily

operable. O. Reg. 145/00, s. 18 (2).

(8) A temporary standpipe shall have at least one hose outlet per floor, with a valve and a hose attached to each hose outlet and a nozzle attached to each hose. O. Reg. 145/00, s. 18 (2).

(9) In addition to the requirements of subsection (8), there shall be a connection to which there is clear access at all times, located between 30 and 90 centimetres above ground level on a side of the building that faces the street. O. Reg. 145/00, s. 18 (2).

(10) A hose outlet on a temporary standpipe,

(a) shall have a valve; and

(b) shall be capable of accepting a hose that is 38 millimetres in diameter. O. Reg. 145/00, s. 18 (2).

(11) If a temporary standpipe is installed in a building under construction, the constructor shall post at the project, or have available for review, a floor plan of the building indicating,

(a) the location of the hose outlets on each floor;

(b) the location of the point on the perimeter of each floor that is furthest from the hose outlet on that floor; and

(c) the location of each exit on each floor. O. Reg. 145/00, s. 18 (2).

(12) The constructor shall give a copy of the floor plan to the fire department located nearest to the project. O. Reg. 145/00, s. 18 (2).

58. No flammable liquid shall be transferred from one container to another by the direct application of air under pressure. O. Reg. 213/91, s. 58.

DUST CONTROL

59. If the dissemination of dust is a hazard to a worker, the dust shall be adequately controlled or each worker who may be exposed to the hazard shall be provided with adequate personal protective equipment. O. Reg. 145/00, s. 19.

60.-63. REVOKED: O. Reg. 628/05, s. 2.

PUBLIC WAY PROTECTION

64. (1) No work shall be carried out on a building or structure located 4.5 metres or less from a public way unless a covered way is constructed over the part of the public way that is adjacent to the project. O. Reg. 213/91, s. 64 (1); O. Reg. 142/17, s. 11.

(2) Subsection (1) does not apply with respect to a building or structure if the work being done is enclosed. O. Reg. 213/91, s. 64 (2).

(3) A covered way,

- (a) shall have an unobstructed height of not less than 2.4 metres;
- (b) shall have an unobstructed width of not less than 1.1 metres or, if it is over a sidewalk that is less than 1.1 metres wide, have a width equal to the width of the sidewalk;
- (c) shall be capable of supporting any load likely to be applied to it and capable of supporting a load of at least 2.4 kilonewtons per square metre;
- (d) shall have a weather-tight roof;
- (e) shall have the side adjacent to the project covered with a partition that has a smooth surface on the public way side;
- (f) shall have a railing one metre high from ground level on the street side; and
- (g) shall have adequate lighting within the public way. O. Reg. 213/91, s. 64 (3).

65. If work on a project may endanger a person using a public way, a sturdy fence at least 1.8 metres in height shall be constructed between the public way and the project. O. Reg. 213/91, s. 65.

66. Machinery, equipment and material that is being used, left or stored where it may be a hazard to traffic on a public way shall be marked by flashing devices. O. Reg. 213/91, s. 66; O. Reg. 145/00, s. 20.

TRAFFIC CONTROL

67. (1) In this section,

“barricade” means a device that provides a visual indicator of the path a motorist is supposed to take; (“repère”)

“barrier” means a device that provides a physical limitation through which a vehicle would not normally pass, and includes a concrete barrier; (“barrière”)

“mobile operation” means work, including a paving operation, that is done on a highway or the shoulder of a highway and moves along at speeds of less than 30 kilometres per hour. (“travaux mobiles”) O. Reg. 145/00, s. 21.

(2) If a worker at a project on a highway may be endangered by

vehicular traffic unrelated to the project, the project shall make use of as many of the following measures as is necessary to adequately protect the worker:

1. Barriers.
2. Barricades.
3. Delineators.
4. Lane control devices.
5. Warning signs.
6. Flashing lights.
7. Flares.
8. Traffic control devices.
9. Blocker trucks.
10. Crash trucks.
11. Sign trucks.
12. Speed control devices.
13. Longitudinal buffer areas. O. Reg. 145/00, s. 21.

(3) In addition to the measures listed in subsection (2) but subject to section 68, a worker may be used to direct traffic. O. Reg. 145/00, s. 21.

(4) Every employer shall develop in writing and implement a traffic protection plan for the employers' workers at a project if any of them may be exposed to a hazard from vehicular traffic. O. Reg. 145/00, s. 21.

(5) The traffic protection plan,

- (a) shall specify the vehicular traffic hazards and the measures described in subsection (2) to be used to protect workers; and
- (b) shall be kept at the project and made available to an inspector or a worker on request. O. Reg. 145/00, s. 21.

(6) A worker who is required to set up or remove measures described in subsection (2) on a roadway or a shoulder of a roadway,

- (a) shall be a competent worker;
- (b) shall not perform any other work while setting up or removing the measures; and
- (c) shall be given adequate written and oral instructions, in a language

that he or she understands, with respect to setting up or removing the measures. O. Reg. 145/00, s. 21.

(7) Adequate barriers shall be installed to protect workers at a project from vehicular traffic if the project,

- (a) is on a freeway;
- (b) is not a mobile operation; and
- (c) is expected to require more than five days to complete. O. Reg. 145/00, s. 21; O. Reg. 345/15, s. 11 (1).

(8), (9) REVOKED: O. Reg. 345/15, s. 11 (2).

(10) If it is not practical to install barriers as subsection (7) requires, or if the project is expected to require five days or less to complete, crash trucks shall be adequately positioned to protect workers. O. Reg. 145/00, s. 21; O. Reg. 345/15, s. 11 (3).

(11) If work on a shoulder of a freeway is expected to take less than 30 minutes to complete, a vehicle with four-way flashers and a 360-degree beacon light shall be provided. O. Reg. 145/00, s. 21.

(12) The following measures shall be taken to protect a worker at a project if the project is on a freeway and involves a mobile operation:

1. An adequate number of crash trucks shall be adequately positioned between vehicular traffic and workers in order to adequately protect workers at the project.
2. If the operation involves intermittent stops averaging 30 minutes or less, an adequate number of barricades or delineators shall be adequately positioned between vehicular traffic and the worker.
3. If the operation involves intermittent stops averaging more than 30 minutes,
 - i. an adequate longitudinal buffer area shall be provided if physically possible,
 - ii. the lane on which work is being done shall be adequately identified with lane closure signs and a lane closure taper, and
 - iii. an adequate number of barricades or delineators shall be adequately positioned between vehicular traffic and the work area. O. Reg. 242/16, s. 7.

68. The following requirements apply with respect to a sign used by a worker to direct vehicular traffic:

1. It shall be octagonal in shape, measure 450 millimetres between opposite sides, and be mounted on a pole that is 1.2 metres long.
2. It shall be made of material with at least the rigidity of plywood that is six millimetres thick.
3. On one side it shall be high-intensity retro-reflective grade red in colour, with the word "STOP" written in legible high-intensity retro-reflective grade white letters 150 millimetres high in a central position on the sign.
4. On the other side it shall be high-intensity retro-reflective micro-prismatic fluorescent chartreuse in colour, with a black diamond-shaped border that is at least 317 millimetres by 317 millimetres, and with the word "SLOW" written in legible black letters 120 millimetres high in a central position on the sign.
5. It shall be maintained in a clean and legible condition. O. Reg. 145/00, s. 22; O. Reg. 142/17, s. 12.

69. (1) This section applies with respect to directing vehicular traffic that may be a hazard to workers on a public way. O. Reg. 145/00, s. 23.

(2) A worker shall not direct vehicular traffic for more than one lane in the same direction. O. Reg. 145/00, s. 23.

(3) A worker shall not direct vehicular traffic if the normal posted speed limit of the public way is more than 90 kilometres per hour. O. Reg. 145/00, s. 23.

(4) A worker who is required to direct vehicular traffic,

(a) shall be a competent worker;

(b) shall not perform any other work while directing vehicular traffic;

(c) shall be positioned in such a way that he or she is endangered as little as possible by vehicular traffic; and

(d) shall be given adequate written and oral instructions, in a language that he or she understands, with respect to directing vehicular traffic, and those instructions shall include a description of the signals that are to be used. O. Reg. 145/00, s. 23.

(5) The written instructions referred to in clause (4) (d) shall be kept at the project. O. Reg. 145/00, s. 23.

69.1 (1) A worker who may be endangered by vehicular traffic shall wear a garment that covers at least his or her upper body and has the following features:

1. The garment shall be fluorescent blaze or international orange in colour.
 2. On the front and the back, there shall be two yellow stripes that are 5 centimetres wide. The yellow area shall total at least 500 square centimetres on the front and at least 570 square centimetres on the back.
 3. On the front, the stripes shall be arranged vertically and centred and shall be approximately 225 millimetres apart, measured from the centre of each stripe. On the back, they shall be arranged in a diagonal "X" pattern.
 4. The stripes shall be retro-reflective and fluorescent. O. Reg. 145/00, s. 23.
- (2) If the garment is a vest, it shall have adjustable fit. O. Reg. 145/00, s. 23.
- (3) A nylon vest to which this section applies shall also have a side and front tear-away feature. O. Reg. 145/00, s. 23; O. Reg. 345/15, s. 12.
- (4) In addition, a worker who may be endangered by vehicular traffic during night-time hours shall wear retro-reflective silver stripes encircling each arm and leg, or equivalent side visibility-enhancing stripes with a minimum area of 50 square centimetres per side. O. Reg. 145/00, s. 23.

ACCESS TO AND EGRESS FROM WORK AREAS

- 70.** (1) Access to and egress from a work area located above or below ground level shall be by stairs, runway, ramp or ladder. O. Reg. 213/91, s. 70 (1).
- (2) Subsection (1) does not apply to a work platform within the meaning of section 136.1 that is able to be moved to give access to a floor, roof or platform or to ground level. O. Reg. 213/91, s. 70 (2); O. Reg. 242/16, s. 8.
- 71.** Adequate means of egress shall be provided from a work area to permit the evacuation of workers during an emergency. O. Reg. 213/91, s. 71.
- 72.** A work area, a route to and from a work area and a scaffold platform on which work is being performed shall be maintained at all times in a condition that does not endanger workers and, without limiting the generality of the foregoing,
- (a) shall be kept clear of obstructions;
 - (b) shall be kept clear of snow, ice or other slippery material; and

- (c) shall be treated with sand or similar material when necessary to ensure a firm footing. O. Reg. 213/91, s. 72.

PLATFORMS, RUNWAYS AND RAMPS

73. (1) Runways, ramps and platforms other than scaffold platforms shall meet the requirements of this section. O. Reg. 213/91, s. 73 (1).

(2) A runway, ramp or platform shall be designed, constructed and maintained to support or resist, without exceeding the allowable unit stresses for the materials of which it is made,

- (a) all loads and forces to which it is likely to be subjected; and
- (b) at least 2.4 kilonewtons per square metre. O. Reg. 213/91, s. 73 (2).

(3) No runway, ramp or platform shall be loaded in excess of the load that it is designed and constructed to bear. O. Reg. 213/91, s. 73 (3).

(4) A runway, ramp or platform shall be at least 460 millimetres wide and shall be securely fastened in place. O. Reg. 213/91, s. 73 (4).

74. (1) A ramp shall have,

- (a) a slope not exceeding a gradient of 1 in 3; and
- (b) if its slope exceeds a gradient of 1 in 8, cross cleats made from nineteen millimetres by thirty-eight millimetres boards that are securely nailed to the ramp and spaced at regular intervals not exceeding 500 millimetres. O. Reg. 213/91, s. 74 (1).

(2) Subsection (1) does not apply to a ramp installed in the stairwell of a building not exceeding two storeys in height if the ramp,

- (a) has a slope not exceeding a gradient of 1 in 1; and
- (b) has cross cleats made from thirty-eight millimetres by thirty-eight millimetres boards that are securely nailed to the ramp and spaced at regular intervals not exceeding 300 millimetres. O. Reg. 213/91, s. 74 (2).

STAIRS AND LANDINGS

75. (1) No work shall be performed in a building or structure unless stairs are installed in accordance with this section. O. Reg. 213/91, s. 75 (1); O. Reg. 327/19, s. 1 (1).

(2) As the construction of a building or structure progresses, permanent or temporary stairs shall be installed from the lowest level, including the basement, up to,

- (a) the uppermost work level; or

(b) if stairs would interfere with work on the uppermost work level, no more than two storeys or nine metres below the uppermost work level, whichever distance is shorter. O. Reg. 213/91, s. 75 (2); O. Reg. 142/17, s. 13; O. Reg. 327/19, s. 1 (2).

(3) Subsection (2) does not apply with respect to,

(a) a part of a building or structure in which only the structural steel beams or columns are erected;

(b) a structure to which a permanent ladder is attached before the structure is raised into position; or

(c) a part of a building or structure in which formwork or falsework is erected to a suspended slab. O. Reg. 213/91, s. 75 (3); O. Reg. 327/19, s. 1 (3).

76. (1) Temporary stairs and landings shall be designed, constructed and maintained to support a live load of 4.8 kilonewtons per square metre without exceeding the allowable unit stresses for each material used. O. Reg. 213/91, s. 76 (1).

(2) No temporary stair or landing shall be loaded in excess of the load it is designed and constructed to bear. O. Reg. 213/91, s. 76 (2).

77. (1) No work shall be performed in a building or structure with stairs unless the stairs meet the requirements of this section. O. Reg. 213/91, s. 77 (1).

(2) Stairs shall have,

(a) a clear width of at least 500 millimetres;

(b) treads and risers of uniform width, length and height;

(c) subject to subsection (3), stringers with a maximum slope of 50 degrees from the horizontal;

(d) landings that are less than 4.5 metres apart measured vertically;

(e) a securely fastened and supported wooden handrail on the open sides of each flight; and

(f) a guardrail on the open side of each landing. O. Reg. 213/91, s. 77 (2).

(3) The stringers of prefabricated stairs erected inside a tower formed by scaffold frame sections shall have a maximum slope of 60 degrees from the horizontal. O. Reg. 213/91, s. 77 (3).

(4) A wooden handrail shall measure thirty-eight millimetres by eighty-

nine millimetres and shall be free of loose knots, sharp edges, splinters and shakes. O. Reg. 213/91, s. 77 (4).

(5) Skeleton steel stairs shall have temporary wooden treads securely fastened in place that are made of suitable planking extending the full width and breadth of the stairs and landings. O. Reg. 213/91, s. 77 (5).

LADDERS

78. In sections 78 to 84,

“extension trestle ladder” means a self-supporting portable ladder that is adjustable in length, consisting of a trestle ladder base, a vertically adjustable extension section and an adequate means of locking the ladder base and extension section together; (“escabeau coulissant à chevalet”)

“platform ladder” means a self-supporting portable ladder that is not adjustable in length, where the highest standing level is a platform; (“escabeau à plateforme”)

“single ladder” means a non-self-supporting portable ladder that is not adjustable in length and having only one section; (“échelle simple”)

“step-ladder” means a self-supporting portable ladder that is not adjustable in length, having flat steps and a hinged back, and whose back section is either a single ladder or other supporting device, but does not include a step stool or platform ladder; (“escabeau”)

“step stool” means a self-supporting, portable, fixed or foldable ladder, not adjustable in length, and having,

- (a) a height of 800 millimetres or less, excluding side rails, if any, above the top cap,
- (b) flat steps, but no pail shelf, and
- (c) a ladder top cap that can be stood or stepped on; (“tabouret-escabeau”)

“top step” means the first step below the top cap of a step-ladder or, if there is no top cap, the first step below the top of the rails; (“échelon supérieur”)

“trestle ladder” means a self-supporting portable ladder, non-adjustable in length, having two sections and hinged at the top so as to be able to form equal angles with the base. (“escabeau à chevalet”)O. Reg. 345/15, s. 13.

79. A ladder shall be designed, constructed and maintained so as not to

endanger a worker and shall be capable of withstanding all loads to which it may be subjected. O. Reg. 345/15, s. 13.

80. (1) A portable ladder at a project shall be manufactured and shall meet the design, performance, test and marking requirements of a Grade 1, Grade 1A or Grade 1AA ladder in the CSA Standard Z11-12, Portable Ladders. O. Reg. 345/15, s. 13.

(2) Despite subsection (1), a portable single ladder that is custom-built for use at a project may be used at the project if the ladder has,

- (a) rungs spaced at 300 millimetres on centres;
- (b) side rails at least 300 millimetres apart; and
- (c) a maximum length, measured along its side rail, of not more than nine metres. O. Reg. 345/15, s. 13.

(3) If a portable single ladder under subsection (2) is made of wood, the ladder shall also,

- (a) be made of wood that is straight-grained and free of loose knots, sharp edges, splinters and shakes; and
- (b) not be painted or coated with an opaque material that obscures the wood grain or interferes with inspections of the ladder. O. Reg. 345/15, s. 13.

(4) If the rungs of a ladder under subsection (3) are of the cleat type, the ladder shall also,

- (a) have side rails that are not less than 400 millimetres but not more than 610 millimetres apart;
- (b) have side rails that measure not less than,
 - (i) 38 millimetres by 89 millimetres if the ladder is 5.8 metres long or less, or
 - (ii) 38 millimetres by 140 millimetres if the ladder is more than 5.8 metres long;
- (c) have rungs that measure not less than,
 - (i) 19 millimetres by 64 millimetres if the side rails are 400 millimetres apart, or
 - (ii) 19 millimetres by 89 millimetres if the side rails are more than 400 millimetres apart; and
- (d) have rungs braced by filler blocks that are at least 19 millimetres thick and located between the rungs. O. Reg. 345/15, s. 13.

(5) If a ladder under subsection (3) is a double-width wooden ladder, the ladder shall also,

- (a) have three evenly-spaced rails that measure at least 38 millimetres by 140 millimetres;
- (b) have rungs that,
 - (i) measure at least 38 millimetres by 89 millimetres,
 - (ii) extend the full width of the ladder, and
 - (iii) are braced by filler blocks that are at least 19 millimetres thick; and
- (c) be at least 1.5 metres wide but not more than 2 metres wide. O. Reg. 345/15, s. 13.

81. (1) A portable ladder,

- (a) shall be free from defective or loose rungs;
- (b) shall be placed on a firm and level footing or support surface; and
- (c) shall not be used in an elevator shaft or a similar hoisting area when the shaft or area is being used for hoisting. O. Reg. 345/15, s. 13.

(2) A non-self-supporting portable ladder shall be situated so that its base is not less than one-quarter, and not more than one-third, of the length of the ladder from a point directly below the top of the ladder and at the same level as the base of the ladder, if the ladder is not securely fastened to prevent its movement. O. Reg. 345/15, s. 13.

(3) A portable ladder or ladder section shall not be tied or fastened to another ladder or ladder section to increase its length unless the manufacturer's instructions allow for this. O. Reg. 345/15, s. 13.

(4) A manufactured portable ladder shall be used in accordance with the manufacturer's instructions. O. Reg. 345/15, s. 13.

82. (1) This section applies if a portable ladder is used as a means of access and egress between,

- (a) levels of a building or structure;
 - (b) the ground or grade level to a building or structure; or
 - (c) different work surface levels. O. Reg. 345/15, s. 13.
- (2) The ladder,

- (a) shall extend at the upper level at least 900 millimetres above the landing surface;
- (b) shall, subject to subsection (3), have a clear space of at least 150 millimetres behind every rung;
- (c) shall be located so that an adequate landing surface that is clear of obstructions is available at the top and bottom of the ladder for access and egress; and
- (d) shall be secured at the top and bottom to prevent movement of the ladder. O. Reg. 345/15, s. 13.

(3) Clause (2) (b) does not apply to a ladder lying on an excavation wall that is sloped, as required by section 234. O. Reg. 345/15, s. 13.

83. (1) When a step-ladder is being used, its legs shall be fully spread open and its spreaders shall be locked. O. Reg. 345/15, s. 13.

- (2) No worker shall stand or step on,
 - (a) the top cap, top step or pail shelf of a step-ladder;
 - (b) the top cap or top step of a combination ladder when it is used as a step-ladder;
 - (c) the top step of the extension section of an extension trestle ladder; or
 - (d) the top step of a trestle ladder. O. Reg. 345/15, s. 13.

84. (1) Subject to subsection (2), an access ladder fixed in position,

- (a) shall be vertical;
- (b) shall have rest platforms at not more than nine metre intervals;
- (c) shall be offset at each rest platform;
- (d) where the ladder extends over five metres above grade, floor or landing, shall have a safety cage commencing not more than 2.2 metres above grade, floor or landing and continuing at least 90 centimetres above the top landing with openings to permit access by a worker to rest platforms or to the top landing;
- (e) shall have side rails that extend 90 centimetres above the landing;
- (f) shall have rungs that are at least 15 centimetres from the wall and spaced at regular intervals;
- (g) shall have an adequate landing surface that is clear of obstructions at the top and bottom of the ladder for access and egress;

(h) shall be free from defective or loose rungs; and

(i) shall not be used in an elevator shaft or a similar hoisting area when the shaft or area is being used for hoisting. O. Reg. 631/94, s. 2; O. Reg. 345/15, s. 14 (1, 2).

(2) Clauses (1) (b), (c) and (d) do not apply to any access ladder on a tower, water tank, chimney or similar structure that has a safety device that will provide protection should a worker using the ladder fall. O. Reg. 345/15, s. 14 (3).

85., 86. REVOKED: O. Reg. 145/00, s. 24.

FORMS, FORMWORK, FALSEWORK AND RE-SHORING

87. (1) Formwork, falsework and re-shoring shall be designed, constructed, supported and braced so that they are capable of withstanding all loads and forces likely to be applied to them,

(a) without exceeding the allowable working loads established for any component of the structure; and

(b) without causing uplift, sliding, overturning or lateral displacement of the system. O. Reg. 213/91, s. 87 (1).

(2) No formwork, falsework or re-shoring shall be loaded in excess of the load that it is designed and constructed to bear. O. Reg. 213/91, s. 87 (2).

(3) The allowable working load of the formwork, falsework or re-shoring shall be established,

(a) by an engineer in accordance with good engineering practice; or

(b) by testing the principal components to their ultimate strength in a manner that simulates the actual loading conditions to which the formwork, falsework or re-shoring is likely to be subjected and by applying a reduction factor, in accordance with good engineering practice, to the values of ultimate strength. O. Reg. 213/91, s. 87 (3).

(4) The results of the testing in clause (3) (b) shall be verified and certified by an engineer and made available to an inspector upon request. O. Reg. 213/91, s. 87 (4).

(5) If single post shores are placed more than one tier high, the junction of each tier shall be braced against a fixed support in at least two directions in order to prevent any lateral movement. O. Reg. 213/91, s. 87 (5).

88. Formwork and falsework shall not be removed unless,

- (a) the concrete is strong enough to support itself and any loads that may be applied to the structure; or
- (b) the concrete and the structure are adequately re-shored. O. Reg. 213/91, s. 88.

89. (1) This section applies with respect to formwork, falsework and re-shoring that includes,

- (a) a tubular metal frame;
- (b) a column whose effective length is dependent upon lateral restraints between the ends of the column;
- (c) shores placed one upon another to form a supporting system that is more than one tier in height;
- (d) shores which are three metres or more in height;
- (e) a truss;
- (f) members so connected to one another that a load applied to one member may alter or induce stress in another member; or
- (g) a unitized modular formwork or falsework structure intended to be moved as a unit. O. Reg. 213/91, s. 89 (1).

(2) Formwork and falsework shall be designed by an engineer in accordance with good engineering practice and be installed or erected in accordance with the design drawings. O. Reg. 213/91, s. 89 (2).

(3) Formwork and falsework shall, before the placement of concrete, be inspected by an engineer or by a competent worker designated in writing by the engineer. O. Reg. 213/91, s. 89 (3).

(4) The person carrying out the inspection shall state in writing whether the formwork and falsework is installed or erected in accordance with the design drawings for it. O. Reg. 213/91, s. 89 (4).

(5) The constructor shall keep the design drawings and the statements on the project while the formwork or the falsework is in use. O. Reg. 213/91, s. 89 (5).

90. Re-shoring shall be designed by an engineer in accordance with good engineering practice and be erected in accordance with the design drawings. O. Reg. 213/91, s. 90.

91. Falsework and re-shoring,

- (a) shall have sound and rigid footings capable of carrying the maximum

load to which the footings may be subjected without settlement or deformation of the soil or structure below the footings; and

- (b) shall be adequately protected to prevent deformation caused by frost heave. O. Reg. 213/91, s. 91.

92. (1) Design drawings by an engineer for the formwork, falsework or re-shoring,

- (a) if a manufactured system is used, shall identify the components;
- (b) if non-manufactured system components are used, shall show the size, grade and specifications of the non-manufactured system components;
- (c) shall show the design loads for the structure and shall detail the bracing and external ties required to adequately support the design loads;
- (d) if the structure is a unitized modular formwork or falsework structure intended to be lifted or moved as a unit, shall show the attachment points for rigging and hoisting; and
- (e) shall set out the erection instructions that are specified by the manufacturer or by the engineer.
- (f) REVOKED: O. Reg. 85/04, s. 11.

O. Reg. 213/91, s. 92 (1); O. Reg. 85/04, s. 11.

(2) The constructor shall keep the design drawings on the project while the formwork, falsework or re-shoring is in use. O. Reg. 213/91, s. 92 (2).

EQUIPMENT, GENERAL

93. (1) All vehicles, machinery, tools and equipment shall be maintained in a condition that does not endanger a worker. O. Reg. 213/91, s. 93 (1).

- (2) No vehicle, machine, tool or equipment shall be used,
 - (a) while it is defective or hazardous;
 - (b) when the weather or other conditions are such that its use is likely to endanger a worker; or
 - (c) while it is being repaired or serviced, unless the repair or servicing requires that it be operated. O. Reg. 213/91, s. 93 (2); O. Reg. 145/00, s. 25 (1).

(3) All vehicles, machines, tools and equipment shall be used in accordance with any operating manuals issued by the manufacturers. O. Reg. 145/00, s. 25 (2).

(4) For vehicles, machines, tools and equipment rated at greater than 10 horsepower, copies of any operating manuals issued by the manufacturers shall be kept readily available at the project. O. Reg. 145/00, s. 25 (2).

94. (1) All mechanically-powered vehicles, machines, tools and equipment rated at greater than 10 horsepower shall be inspected by a competent worker to determine whether they can handle their rated capacity and to identify any defects or hazardous conditions. O. Reg. 145/00, s. 26.

(2) The inspections shall be performed before the vehicles, machines, tools or equipment are first used at the project and thereafter at least once a year or more frequently as recommended by the manufacturer. O. Reg. 145/00, s. 26.

95. (1) Every replacement part for a vehicle, machine, tool or equipment shall have at least the same safety factor as the part it is replacing. O. Reg. 213/91, s. 95 (1).

(2) No modification to, extension to, repair to or replacement of a part of a vehicle, machine, tool or equipment shall result in a reduction of the safety factor of the vehicle, machine, tool or equipment. O. Reg. 213/91, s. 95 (2).

96. (1) No worker shall operate a vehicle or powered machine, tool or equipment at a project unless he or she is competent to do so. O. Reg. 145/00, s. 26; O. Reg. 345/15, s. 15 (1).

(2) However, a worker being trained in the operation of a vehicle or powered machine, tool or equipment may operate it while being instructed and supervised by a competent person. O. Reg. 145/00, s. 26; O. Reg. 345/15, s. 15 (2).

97. (1) Every vehicle other than a trailer shall be equipped with brakes and a seat or other place for the vehicle operator. O. Reg. 213/91, s. 97 (1).

(2) No person other than the operator shall ride on a vehicle unless a seat is provided for the use of, and is used by, the person. O. Reg. 213/91, s. 97 (2).

98. The means of access to any operator's station in a vehicle, machine or equipment shall not endanger the operator and shall have skid-resistant walking, climbing and work surfaces. O. Reg. 213/91, s. 98.

99. A cab or screen shall be provided to protect a worker who is exposed to an overhead hazard while operating a vehicle. O. Reg. 213/91, s. 99.

100. (1) No vehicle, machine or equipment shall be drawn or towed by another vehicle on a project unless there are two separate means of attachment to the vehicle drawing or towing it. O. Reg. 213/91, s. 100 (1).

(2) Subsection (1) does not apply with respect to a vehicle being drawn or towed in which there is an operator and that has brakes that are able to stop the vehicle with its load, if any. O. Reg. 213/91, s. 100 (2).

(3) Each means of attachment referred to in subsection (1) shall be constructed and attached in such a way that the failure of one means of attachment does not permit the vehicle, machine or equipment being drawn or towed to become detached from the other vehicle. O. Reg. 213/91, s. 100 (3).

101. (1) No worker shall remain on or in a vehicle, machine or equipment while it is being loaded or unloaded if the worker might be endangered by remaining there. O. Reg. 213/91, s. 101 (1).

(2) Such action as may be necessary to prevent an unattended vehicle, machine or equipment from being started or set in motion by an unauthorized person shall be taken. O. Reg. 213/91, s. 101 (2).

(3) An unattended vehicle, machine or equipment shall have its brakes applied and its wheels blocked to prevent movement when the vehicle, machine or equipment is on sloping ground or is adjacent to an excavation. O. Reg. 213/91, s. 101 (3).

102. No operator shall leave unattended the controls of,

- (a) a front-end loader, backhoe or other excavating machine with its bucket raised;
- (b) a bulldozer with its blade raised;
- (c) a fork-lift truck with its forks raised; or
- (d) Subject to section 164 a crane or other similar hoisting device with its load raised. O. Reg. 213/91, s. 102.

103. (1) No worker shall operate a shovel, backhoe or similar excavating machine in such a way that it or part of its load passes over a worker. O. Reg. 213/91, s. 103 (1).

(2) No worker shall operate a crane or similar hoisting device in such a way that part of its load passes over another worker unless the other worker is receiving the load or is engaged in sinking a shaft. O. Reg. 213/91, s. 103 (2).

(3) If practicable, a worker who is receiving a load or is engaged in sinking a shaft shall be positioned so that no load or part of a load carried

by a crane or similar hoisting device passes over the worker. O. Reg. 213/91, s. 103 (3).

(4) Subsections (2) and (3) do not apply in respect of a multi-tiered load as defined in section 103.1 if written procedures have been developed and implemented for the particular project in accordance with that section. O. Reg. 627/05, s. 2.

103.1 (1) In this section,

“move” includes raise and lower; (“déplacer”)

“multi-tiered load” means two or three individually rigged structural steel pieces that are,

- (a) suspended so that they remain horizontal,
- (b) aligned vertically, and
- (c) moved simultaneously by a crane; (“charge superposée”)

“multi-tiered load hoisting operation” means the moving of one or more multi-tiered loads by one crane at a project; (“opération de levage d’une charge superposée”)

“procedures” means the procedures prepared under subsection (7). (“procédures”) O. Reg. 627/05, s. 3.

(2) A multi-tiered load,

- (a) shall not contain structural steel pieces that are bundled together;
- (b) shall not contain more than three structural steel pieces;
- (c) shall not use one structural steel piece to support another;
- (d) shall have each structural steel piece independently slung back to the main load hook or master link;
- (e) shall be lowered only by a crane using power-controlled lowering. O. Reg. 627/05, s. 3.

(3) A crane shall be used to move only one multi-tiered load at a time. O. Reg. 627/05, s. 3.

(4) A crane shall not be used for a multi-tiered load if it is contrary to the crane manufacturer’s specifications or limitations to do so. O. Reg. 627/05, s. 3.

(5) No worker shall be in an area where a multi-tiered load hoisting operation is taking place unless he or she is directly engaged in the operation. O. Reg. 627/05, s. 3.

(6) Before a multi-tiered load hoisting operation is begun at a project, written procedures to ensure the safety of workers engaged in the operation shall be developed and implemented. O. Reg. 627/05, s. 3.

(7) The procedures shall be prepared by an engineer in accordance with good engineering practice and shall,

- (a) include design drawings that illustrate the arrangement and dimensions of the structural steel pieces, the assembly of rigging components and devices, and all attachment points;
- (b) identify the crane and its rated load-carrying capacity, and identify and specify its limitations and restrictions, if any;
- (c) describe the method of determining the weight of the structural steel pieces;
- (d) specify the maximum load per lift and the maximum reach of the crane per lift;
- (e) identify all factors that could affect the safety of the multi-tiered load hoisting operation, such as wind speed, weather conditions, potential overlapping of cranes and other restrictions;
- (f) state the measures to be taken to control and secure multi-tiered loads while they are being moved;
- (g) specify any circumstances that would require additional work, including inspections, to be performed by an engineer to ensure the safety of any worker engaged in the multi-tiered load hoisting operation; and
- (h) identify all critical parts of the rigging and of the rigged structural steel pieces that are to be inspected before each lift, and set out the inspection criteria to be followed. O. Reg. 627/05, s. 3; O. Reg. 142/17, s. 14.

(8) The employer responsible for a multi-tiered load hoisting operation shall,

- (a) create a document that identifies the workers engaged in the multi-tiered load hoisting operation by name and job title and states their respective duties;
- (b) ensure that, before the multi-tiered load hoisting operation is begun, a copy of the procedures is provided to and reviewed with each worker engaged in the operation;
- (c) ensure that the procedures are implemented, and are followed throughout the multi-tiered load hoisting operation;

- (d) ensure that any deviations from the procedures are approved by an engineer, in writing, before any multi-tiered load is moved; and
- (e) unless the engineer who prepared the procedures specifies otherwise, appoint a competent worker to ensure that the procedures, including the inspections described in clause (7) (h), are followed before any multi-tiered load is moved. O. Reg. 627/05, s. 3.

(9) The employer responsible for a multi-tiered load hoisting operation shall keep a copy of the following available for inspection at the project until the operation is completed:

1. The procedures.
2. The document described in clause (8) (a).
3. Any approvals given under clause (8) (d). O. Reg. 627/05, s. 3.

(10) Before the first multi-tiered load hoisting operation is started at a project, the constructor shall give notice to the Ministry office located nearest the project, in person, by telephone, by fax or by electronic means. O. Reg. 627/05, s. 3.

104. (1) Every project shall be planned and organized so that vehicles, machines and equipment are not operated in reverse or are operated in reverse as little as possible. O. Reg. 145/00, s. 27.

(2) Vehicles, machines and equipment at a project shall not be operated in reverse unless there is no practical alternative to doing so. O. Reg. 145/00, s. 27.

(3) Operators of vehicles, machines and equipment shall be assisted by signallers if either of the following applies:

1. The operator's view of the intended path of travel is obstructed.
2. A person could be endangered by the vehicle, machine or equipment or by its load. O. Reg. 145/00, s. 27.

(4) Subsection (3) also applies to shovels, backhoes and similar excavating machines and to cranes and similar hoisting devices. O. Reg. 145/00, s. 27.

(5) The operator and the signaller shall,

- (a) jointly establish the procedures by which the signaller assists the operator; and
- (b) follow those procedures. O. Reg. 145/00, s. 27.

(6) If subsection (3) applies to the project and it is not possible to carry out the project without some operation of vehicles and equipment in reverse, signs shall be posted at the project in conspicuous places warning workers of the danger. O. Reg. 145/00, s. 27.

105. A dump truck shall be equipped with an automatic audible alarm that signals when the truck is being operated in reverse. O. Reg. 145/00, s. 27.

106. (1) A signaller shall be a competent worker and shall not perform other work while acting as a signaller. O. Reg. 213/91, s. 106 (1).

(1.1) The signaller shall wear a garment that covers at least his or her upper body and has the following features:

1. The garment shall be fluorescent blaze or international orange in colour.
2. On the front and the back, there shall be two yellow stripes that are 5 centimetres wide. The yellow area shall total at least 500 square centimetres on the front and at least 570 square centimetres on the back.
3. On the front, the stripes shall be arranged vertically and centred and shall be approximately 225 millimetres apart, measured from the centre of each stripe. On the back, they shall be arranged in a diagonal "X" pattern.
4. The stripes shall be retro-reflective and fluorescent. O. Reg. 145/00, s. 28.

(1.2) If the garment is a vest, it shall have adjustable fit. O. Reg. 145/00, s. 28.

(1.3) A nylon vest to which this section applies shall also have a side and front tear-away feature. O. Reg. 145/00, s. 28; O. Reg. 345/15, s. 16.

(1.4) In addition, a signaller who may be endangered during night-time hours shall wear retro-reflective silver stripes encircling each arm and leg, or equivalent side visibility-enhancing stripes with a minimum area of 50 square centimetres per side. O. Reg. 145/00, s. 28.

(1.5) The employer shall,

- (a) ensure that the signaller has received adequate oral training in his or her duties and has received adequate oral and written instructions in a language that he or she understands; and
- (b) keep the written instructions at the project. O. Reg. 145/00, s. 28.

(2) A signaller,

(a) shall be clear of the intended path of travel of the vehicle, machine or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine or its load;

(b) REVOKED: O. Reg. 241/23, s. 4(1)

(c) shall have a clear view of the intended path of travel of the vehicle, machine or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine or its load; and

(d) shall watch the part of the vehicle, machine or equipment or crane or similar hoisting device, shovel, backhoe or similar excavating machine or its load whose path of travel the operator cannot see. O. Reg. 213/91, s. 106 (2).

(2.1) A signaller shall, where practicable, be in full view of the operator of the vehicle, machine or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine and, where not practicable, the employer shall provide another means of ensuring clear and direct communication from any signallers to the operator. O. Reg. 241/23, s. 4 (2).

(3) The signaller shall communicate with the operator by means of a telecommunication system or, where visual signals are clearly visible to the operator, by means of prearranged visual signals. O. Reg. 213/91, s. 106 (3).

107. No worker shall use as a work place a platform, bucket, basket, load, hook or sling that is capable of moving and that is supported by a fork-lift truck, front-end loader or similar machine. O. Reg. 213/91, s. 107.

108. Blocking shall be installed to prevent the collapse or movement of part or all of a piece of equipment that is being dismantled, altered or repaired if its collapse or movement may endanger a worker. O. Reg. 213/91, s. 108.

109. Every gear, pulley, belt, chain, shaft, flywheel, saw and other mechanically-operated part of a machine to which a worker has access shall be guarded or fenced so that it will not endanger a worker. O. Reg. 213/91, s. 109.

110. (1) Safety chains, cages or other protection against blown-off side or lock rings shall be used when inflating a tire mounted on a rim. O. Reg. 213/91, s. 110 (1).

(2) If a cage is used, the tire shall be inflated by remote means. O. Reg. 213/91, s. 110 (2).

111. (1) A lifting jack shall have its rated capacity legibly cast or stamped on it in a place where it can be readily seen. O. Reg. 213/91, s. 111 (1).

(2) A lifting jack shall be equipped with a positive stop to prevent overtravel or, if a positive stop is not practicable, with an overtravel indicator. O. Reg. 213/91, s. 111 (2).

112. (1) Every chain-saw shall have a chain that minimizes kickback and a device to stop the chain in the event of a kickback. O. Reg. 213/91, s. 112 (1).

(1.1) No worker shall use a chain-saw unless he or she has been adequately trained in its use. O. Reg. 145/00, s. 29.

(1.2) No worker shall use a chain-saw unless he or she is wearing,

(a) adequate personal protective equipment and clothing, including gloves; and

(b) adequate eye protection and hearing protection. O. Reg. 145/00, s. 29.

(2) A worker shall hold a chain-saw firmly when starting it and firmly in both hands when using it. O. Reg. 213/91, s. 112 (2).

(3) The chain of a chain-saw shall be stopped when not cutting. O. Reg. 213/91, s. 112 (3).

113. No object or material shall be placed, left or stored in a location or manner that may endanger a worker. O. Reg. 213/91, s. 113.

114. A hose that may whip shall be attached to a rope or chain in order to prevent whipping. O. Reg. 213/91, s. 114.

115. No barrel, box or other loose object shall be used as a work place or as a support for a ladder, scaffold or work platform. O. Reg. 213/91, s. 115.

116. (1) No stilts shall be present at or used on a project except in accordance with this section. O. Reg. 443/09, s. 4.

(2) No leg extensions, other than stilts, shall be present at or used on a project. O. Reg. 443/09, s. 4.

(3) Subject to subsection (4), stilts may be used on a project for work in residential units and residential common areas only if they are used for the following purposes:

1. Drywall finishing work.
2. Installation of insulation.

3. Installation of vapour barriers. O. Reg. 443/09, s. 4.

(4) Stilts shall not be used on a scaffold or to climb up or down stairs. O. Reg. 443/09, s. 4.

(5) Stilts used in accordance with this section shall,

(a) be commercially manufactured;

(b) be made of unpainted metal;

(c) have a non-slip surface on the bottom of each base plate;

(d) be in good working condition; and

(e) be suitable for their intended use. O. Reg. 443/09, s. 4.

(6) Stilts may be used to a maximum height of 76 centimetres as measured from the work surface that the user of the stilts would otherwise stand on to the top of the foot plate. O. Reg. 443/09, s. 4.

(7) Stilts may be used on a work surface only if the work surface satisfies the following conditions:

1. It is made of rigid material.

2. It is either level or does not have a slope of more than three per cent.

3. All openings on the work surface are adequately covered or guarded.

4. All open sides of the work surface are adequately guarded.

5. It is free of debris or anything else that may be a hazard to a worker on stilts.

6. All obstructions that cannot be removed are adequately guarded, placed or secured to prevent a worker on stilts from being injured. O. Reg. 443/09, s. 4.

(8) If stilts are used in a work area for which sections 26.1 and 26.3 require a guardrail system, the guardrail system shall be modified by adding,

(a) an additional top rail,

(i) 76 centimetres above the existing top rail, or

(ii) at a height above the existing top rail equal to the height of the stilts being used in the work area; and

(b) an intermediate rail that is located midway between the additional

top rail and the existing top rail. O. Reg. 443/09, s. 4.

(9) A modified guardrail system described in subsection (8) shall be capable of resisting any load it could be subjected to by a worker on stilts. O. Reg. 443/09, s. 4.

(10) An employer shall ensure that a worker who uses stilts is trained in their use by completing an adequate training program that,

- (a) enables the worker to demonstrate proficiency in the safe and proper use of stilts; and
- (b) provides instruction on the relevant requirements of this Regulation; and
- (c) provides instruction on,
 - (i) mounting and dismounting,
 - (ii) adjusting stilts to suit the individual worker and the work,
 - (iii) walking on and working with stilts while maintaining balance and stability,
 - (iv) inspecting stilts for damage and defects,
 - (v) maintaining, servicing and storing stilts,
 - (vi) conducting an inspection of the work area before commencing work to identify hazards for stilts use,
 - (vii) correcting any hazardous conditions identified under subclause (vi), and
 - (viii) setting up tools and materials to ensure they are adequately accessible when using stilts. O. Reg. 443/09, s. 4.

(11) No worker shall use stilts at a project unless he or she has successfully completed a program described in subsection (10) and carries proof of completing the program at all times when using the stilts. O. Reg. 443/09, s. 4.

(12) A worker using stilts at a project shall inspect the stilts for damage, wear, corrosion and other defects the first time each day that the worker uses the stilts. O. Reg. 443/09, s. 4.

(13) An employer shall ensure that a worker does not use stilts that are damaged, worn, corroded or defective and no worker shall use such stilts. O. Reg. 443/09, s. 4.

(14) Stilts shall be stored, serviced and maintained in accordance with the manufacturer's instructions. O. Reg. 443/09, s. 4.

EXPLOSIVE ACTUATED FASTENING TOOL

117. (1) No worker shall use an explosive actuated fastening tool unless he or she has been adequately trained in its use. O. Reg. 145/00, s. 30.

(2) When using an explosive actuated fastening tool, the worker shall carry proof of his or her training in its use. O. Reg. 145/00, s. 30.

(3) No worker shall use an explosive actuated fastening tool unless he or she is wearing,

(a) adequate personal protective equipment; and

(b) adequate eye protection. O. Reg. 145/00, s. 30.

118. A worker using an explosive actuated fastening tool shall inspect it before using it to ensure,

(a) that it is clean;

(b) that all moving parts operate freely;

(c) that its barrel is free from obstruction; and

(d) that it is not defective. O. Reg. 213/91, s. 118.

119. (1) No worker shall use an explosive actuated fastening tool unless it has a suitable protective guard,

(a) that is at least seventy-five millimetres in diameter;

(b) that is mounted at right angles to the barrel of the tool; and

(c) that is centred on the muzzle end of the tool, if practicable. O. Reg. 213/91, s. 119 (1).

(2) An explosive actuated fastening tool shall be inoperable unless,

(a) its muzzle end is held against a surface using a force at least 22 newtons greater than the force equivalent of the weight of the tool measured in newtons; and

(b) when a protective guard is centred on the muzzle end of the tool, the bearing surface of the guard is not tilted more than eight degrees from the work surface. O. Reg. 145/00, s. 31.

(3) Subsection (1) and clause (2) (b) do not apply with respect to an explosive actuated fastening tool if the velocity of a fastener fired from it does not exceed 90 metres per second measured at a distance of two metres from its muzzle end when propelled by the maximum commercially-available explosive load it is chambered to accept. O. Reg.

213/91, s. 119 (3).

(4) An explosive actuated fastening tool that is designed to require dismantling into separate parts for loading shall be inoperable unless the separate parts are locked together. O. Reg. 145/00, s. 31.

(5) An explosive actuated fastening tool shall have a firing mechanism that prevents the tool from being fired if it is dropped or while it is being loaded or prepared for firing. O. Reg. 213/91, s. 119 (5); O. Reg. 142/17, s. 15.

(6) The firing movement for an explosive actuated fastening tool shall be a separate action from the operation of bringing the tool into firing position. O. Reg. 145/00, s. 31.

(7) An explosive actuated fastening tool shall not be capable of being fired until the operator performs the two separate actions described in subsection (6). O. Reg. 145/00, s. 31.

120. (1) Every explosive actuated fastening tool shall be stored in a locked container when not in use. O. Reg. 213/91, s. 120 (1).

(2) No explosive actuated fastening tool shall be left unattended when out of its container. O. Reg. 213/91, s. 120 (2).

(3) No explosive actuated fastening tool shall be loaded unless it is being prepared for immediate use. O. Reg. 213/91, s. 120 (3).

(4) No explosive actuated fastening tool, whether or not it is loaded, shall be pointed at a person. O. Reg. 213/91, s. 120 (4).

121. (1) Every explosive load for an explosive actuated fastening tool,

(a) shall be marked or labelled so that a worker can easily identify its strength; and

(b) shall be stored in a locked container unless it is required for immediate use. O. Reg. 213/91, s. 121 (1).

(2) No explosive load for an explosive actuated fastening tool,

(a) shall be stored in a container with explosive loads of other strengths; or

(b) shall be left unattended where it may be available to a worker who is not qualified to operate an explosive actuated fastening tool. O. Reg. 213/91, s. 121 (2).

(3) A misfired explosive load removed from an explosive actuated fastening tool shall be placed in a water-filled container on the project until the misfired explosive load is removed from the project. O. Reg.

213/91, s. 121 (3).

WELDING AND CUTTING

122. (1) Cylinders, piping and fittings used in welding and cutting shall be protected against damage. O. Reg. 213/91, s. 122 (1).

(2) No cylinder of compressed gas used in welding and cutting shall be dropped, hoisted by slings or magnets or transported or stored in a horizontal position. O. Reg. 213/91, s. 122 (2).

(3) The valve of a cylinder shall be closed when the cylinder is spent or is not being used. O. Reg. 213/91, s. 122 (3).

123. Precautions to prevent a fire shall be taken when using a blow torch or welding or cutting equipment or a similar piece of equipment. O. Reg. 213/91, s. 123.

124. (1) No arc welding electrode or ground lead shall be hung over a compressed gas cylinder. O. Reg. 213/91, s. 124 (1).

(2) An area where electric welding is carried on shall be kept free of electrode stubs and metal scrap. O. Reg. 213/91, s. 124 (2).

(3) Receptacles for electrode stubs shall be provided and used. O. Reg. 213/91, s. 124 (3).

ACCESS AT HEIGHTS

125. (1) Where work cannot be done on or from the ground or from a building or other permanent structure without hazard to workers, a worker shall be provided with a scaffold, a suspended work platform, a boatswain's chair or a multi-point suspended work platform that meets the requirements of this Regulation. O. Reg. 242/16, s. 9.

(2) A worker who is on or under a scaffold, a suspended work platform system or a multi-point suspended work platform while it is being erected, altered or dismantled shall be on a part of the scaffold, suspended work platform system or multi-point suspended work platform that meets the requirements of this Regulation. O. Reg. 242/16, s. 9.

SCAFFOLDS AND WORK PLATFORMS

126. (1) Every scaffold shall be designed and constructed to support or resist,

(a) two times the maximum load or force to which it is likely to be subjected, without exceeding the allowable unit stresses for the materials of which it is made; and

(b) four times the maximum load or force to which it is likely to be

subjected without overturning. O. Reg. 213/91, s. 126 (1).

(2) Despite clause (1) (a), a scaffold with structural components whose capacity can only be determined by testing shall be designed and constructed to support or resist three times the maximum load or force to which it is likely to be subjected without causing the failure of any component. O. Reg. 213/91, s. 126 (2).

(3) No scaffold shall be loaded in excess of the load that it is designed and constructed to bear. O. Reg. 213/91, s. 126 (3).

127. (1) The failure load of a scaffold which consists of structural components whose capacity cannot be determined by testing shall be established by testing the components in a manner that simulates the actual loading conditions for which each of the components is fabricated. O. Reg. 213/91, s. 127 (1).

(2) An engineer shall verify and certify the results of a test and the corresponding rated load of the scaffold. O. Reg. 213/91, s. 127 (2).

(3) The constructor shall make available to an inspector upon request a copy of the certification by the engineer. O. Reg. 213/91, s. 127 (3).

128. (1) Every scaffold,

- (a) shall have uprights braced diagonally in the horizontal and vertical planes to prevent lateral movement;
- (b) shall have horizontal members that are adequately secured to prevent lateral movement and that do not have splices between the points of support;
- (c) shall have footings, sills or supports that are sound, rigid and capable of supporting at least two times the maximum load to which the scaffold may be subjected without settlement or deformation that may affect the stability of the scaffold;
- (d) shall have all fittings and gear, including base plates or wheels, installed in accordance with the manufacturer's instructions;
- (e) shall have connecting devices between frames that provide positive engagement in tension and compression;
- (f) shall have safety catches on all hooks; and
- (g) shall be adequately secured at vertical intervals not exceeding three times the least lateral dimension of the scaffold, measured at the base, to prevent lateral movement. O. Reg. 213/91, s. 128 (1).

(2) A scaffold shall be constructed of suitable structural materials and, if lumber is used, it shall be construction grade or Number 1 Grade spruce.

O. Reg. 213/91, s. 128 (2).

(3) A scaffold mounted on pneumatic tires shall not be supported by the pneumatic tires while the scaffold is being erected, used or dismantled. O. Reg. 213/91, s. 128 (3).

(4) If tubular metal frames are used to support masonry units on a scaffold platform, each frame leg shall have a minimum working load of,

- (a) twenty-two kilonewtons for standard frames; and
- (b) 16.7 kilonewtons for walk-through frames. O. Reg. 213/91, s. 128 (4).

129. (1) A scaffold mounted on castors or wheels,

- (a) shall be equipped with a suitable braking device on each castor or wheel; and
- (b) shall have the brakes applied when a worker is on the scaffold. O. Reg. 213/91, s. 129 (1).

(2) A scaffold mounted on castors or wheels shall be equipped with guy wires or outriggers to prevent its overturning if the height of the scaffold platform exceeds three times the least lateral dimension of the scaffold,

- (a) measured at the base of the scaffold; or
- (b) if outriggers are used, measured between the outriggers. O. Reg. 213/91, s. 129 (2).

(3) No scaffold mounted on castors or wheels that has a scaffold platform more than 2.4 metres above the base shall be moved when a worker is on it unless,

- (a) the worker is wearing a full body harness as part of a fall arrest system attached to a fixed support; and
- (b) the scaffold is being moved on a firm level surface. O. Reg. 213/91, s. 129 (3).

130. (1) A scaffold shall be designed by an engineer and shall be erected in accordance with the design if the scaffold exceeds,

- (a) fifteen metres in height above its base support; or
- (b) ten metres in height above its base support if the scaffold is constructed of a tube and clamp system. O. Reg. 213/91, s. 130 (1).

(2) Design drawings for a scaffold shall set out erection instructions and the rated loads for the scaffold. O. Reg. 85/04, s. 12.

(3) An engineer or a competent worker designated by the supervisor of the project shall inspect the scaffold before it is used to ensure that it is erected in accordance with the design drawings. O. Reg. 213/91, s. 130 (3).

(4) The person carrying out an inspection shall state in writing whether the scaffold is erected in accordance with the design drawings. O. Reg. 213/91, s. 130 (4).

(5) The constructor shall keep at a project the design drawings and the written statement for a scaffold while the scaffold is erected. O. Reg. 213/91, s. 130 (5).

131. Only a competent worker shall supervise the erection, alteration and dismantling of a scaffold. O. Reg. 213/91, s. 131.

132. (1) An engineer shall inspect and give a written opinion as to the structural adequacy of a centre pole scaffold used in silo construction when required by subsection (2). O. Reg. 213/91, s. 132 (1).

(2) An inspection shall be performed on the earlier of,

(a) the twenty-fourth time the scaffold is erected following the most recent inspection; or

(b) for a scaffold used in the construction of,

(i) a monolithic silo, two years after the scaffold is erected or after the most recent inspection, and

(ii) a stave silo, one year after the scaffold is erected or after the most recent inspection. O. Reg. 213/91, s. 132 (2).

(3) The employer responsible for constructing the silo shall keep with a scaffold every written opinion by an engineer concerning the scaffold while it is in use on a project. O. Reg. 213/91, s. 132 (3).

(4) The employer responsible for constructing the silo shall record information about the frequency of use of the scaffold in a log book which shall be kept with the scaffold while it is in use on a project. O. Reg. 213/91, s. 132 (4).

133. (1) This section applies with respect to a worker who is installing reinforcing steel on a vertical surface consisting of horizontal reinforcing steel bars. O. Reg. 213/91, s. 133 (1).

(2) A scaffold shall be provided for a worker who is working more than 3.7 metres above the ground or a floor. O. Reg. 213/91, s. 133 (2).

(3) If a scaffold cannot be erected, a worker shall use and wear a work belt. O. Reg. 213/91, s. 133 (3).

(4) No worker who is climbing the vertical surface shall carry reinforcing steel bars. O. Reg. 213/91, s. 133 (4).

134. (1) Every scaffold platform and other work platform shall be designed, constructed and maintained to support or resist, without exceeding the allowable unit stresses for the materials of which it is constructed,

- (a) all loads and forces to which it is likely to be subjected; and
- (b) at least 2.4 kilonewtons per square metre. O. Reg. 213/91, s. 134 (1).

(2) Each component of a scaffold platform or other work platform shall be capable of supporting a load of at least 2.2 kilonewtons without exceeding the allowable unit stress for each material used. O. Reg. 213/91, s. 134 (2).

(3) No scaffold platform or other work platform shall be loaded in excess of the load that it is designed and constructed to bear. O. Reg. 213/91, s. 134 (3).

135. (1) A scaffold platform or other work platform,

- (a) shall be at least 460 millimetres wide;
- (b) if it is 2.4 metres or more above a floor, roof or other surface, consist of planks laid tightly side by side for the full width of the scaffold;
- (c) shall be provided with a guardrail as required by section 26.3;
- (d) shall be provided with a means of access as required by section 70;
- (e) shall not have any unguarded openings; and
- (f) shall have each component secured against slipping from its supports. O. Reg. 213/91, s. 135 (1); O. Reg. 527/00, s. 4.

(2) A scaffold platform or other work platform made of sawn lumber planks shall have planks of number 1 grade spruce that do not have any defect affecting their load-carrying capacity and,

- (a) that bear a legible grade identification stamp or are permanently identified as being number 1 grade spruce;
- (b) that are at least forty-eight millimetres thick by 248 millimetres wide;
- (c) that are arranged so that their span does not exceed 2.1 metres;
- (d) that overhang their supports by not less than 150 millimetres and

not more than 300 millimetres; and

- (e) that are cleated or otherwise secured against slipping. O. Reg. 213/91, s. 135 (2).

136. (1) Cubes of masonry units on a scaffold platform shall be placed directly over the scaffold frame. O. Reg. 213/91, s. 136 (1).

(2) If it is not practicable to comply with subsection (1), the masonry units shall be placed on the scaffold platform in a manner that conforms with the load capability provisions of the scaffold platform as set out in section 134. O. Reg. 213/91, s. 136 (2).

(3) The surface of an outrigger bracket platform used by a masonry worker shall be not more than one metre below the associated material storage platform. O. Reg. 213/91, s. 136 (3).

(4) Masonry units to be installed in a building or structure shall be distributed along the scaffold platform before being used. O. Reg. 213/91, s. 136 (4).

136.0.1 (1) The distance between the platform of an outrigger scaffold and the wall beyond which the scaffold extends shall not exceed 75 millimetres. O. Reg. 242/16, s. 10.

(2) The outrigger beams of an outrigger scaffold shall be secured against horizontal and vertical movement. O. Reg. 242/16, s. 10.

SUSPENDED WORK PLATFORMS AND BOATSWAIN'S CHAIRS

INTERPRETATION AND APPLICATION

136.1 In sections 137 to 142.06,

"allowable suspended load" means the combined weight of a suspended work platform or boatswain's chair, the hoisting device or devices, the rated platform capacity and the suspended portion of the suspension line or lines; ("charge suspendue admissible")

"anchorage connector" means a component or a system of components of a fixed support that secures a suspended work platform or boatswain's chair and its associated suspension lines and lifelines to the fixed support; ("connecteur d'ancrage")

"CSA Standard Z271-10" means Canadian Standards Association (CSA) Standard Z271-10, Safety Code for Suspended Platforms; ("norme CSA Z271-10")

"work platform" means a built or manufactured work surface that, as the context requires, is intended to be used as or is in use as the work

area of a suspended work platform system, but does not include a boatswain's chair. ("plateforme de travail") O. Reg. 242/16, s. 11.

136.2 Sections 137 to 142.06 do not apply to multi-point suspended work platforms. O. Reg. 242/16, s. 11.

GENERAL REQUIREMENTS: DESIGN

137. (1) Every suspended work platform system or powered boatswain's chair, including all components and connections of the suspended work platform system or boatswain's chair, shall be designed by an engineer in accordance with,

- (a) good engineering practice;
- (b) CSA Standard Z271-10, with the exception of clauses 6.1.1 (b) and 6.1.2;
- (c) the requirements of this section; and
- (d) for a suspended work platform, the requirements of section 137.1. O. Reg. 242/16, s. 11.

(2) For the purposes of clause (1) (b), every reference to the National Building Code of Canada in CSA Standard Z271-10 shall be deemed to be a reference to the Building Code. O. Reg. 242/16, s. 11.

(3) Every suspended work platform system or powered boatswain's chair shall be designed to be able to support or resist,

- (a) the rated platform capacity; and
- (b) any other loads likely to be applied to it, including the loads specified in clause 6.1.5 (Design loads from forces imposed on a platform) of CSA Standard Z271-10. O. Reg. 242/16, s. 11.

(4) The design of a suspended work platform system or powered boatswain's chair shall take into account the potential increased loads due to wind on all components of the suspended work platform system or powered boatswain's chair if shielding, tarpaulins, enclosures, signs, banners or other similar items were used or attached. O. Reg. 242/16, s. 11.

(5) The design of a work platform or boatswain's chair shall use the factored load combination calculated in accordance with subsection (6). O. Reg. 242/16, s. 11.

(6) The factored load combination shall be calculated as follows:

$$\rho(\alpha_D D + \gamma \alpha_L L)$$

where,

- ρ is an impact factor of 1.25,
- α_D is a dead load factor 1.25,
- D is the dead load,
- γ is an importance factor of 1.9,
- α_L is a live load factor of 1.5, and
- L is the live load. O. Reg. 242/16, s. 11.

137.1 (1) In addition to the requirements set out in section 137, a suspended work platform shall be designed in accordance with the requirements of this section. O. Reg. 242/16, s. 11.

(2) A work platform shall not have a span of greater than 30 metres between adjacent points of suspension. O. Reg. 242/16, s. 11.

(3) The rated platform capacity for a suspended work platform shall use the relevant minimum live load determined as follows:

1. If the span of the work platform between adjacent points of suspension is 12 metres or less, the minimum live load shall be 340 kilograms.
2. If the span of the work platform between adjacent points of suspension is greater than 12 metres but not more than 15 metres, the minimum live load shall be 450 kilograms.
3. If the span of the work platform between adjacent points of suspension is greater than 15 metres but not more than 20 metres, the minimum live load shall be 680 kilograms.
4. If the span of the work platform between adjacent points of suspension is greater than 20 metres but not more than 25 metres, the minimum live load shall be 900 kilograms.
5. If the span of the work platform between adjacent points of suspension is greater than 25 metres but not more than 30 metres, the minimum live load shall be 1,130 kilograms. O. Reg. 242/16, s. 11.

(4) There shall be an additional load allowance for any construction debris or abrasive blasting grit to a depth of at least 25 millimetres and for other materials that may accumulate or be placed on the work platform as a result of the work. O. Reg. 242/16, s. 11.

(5) In the case of a modular suspended work platform system, all

connections used to transfer a load from one module to another shall be designed to withstand at least the design loads as specified in this section, and any other external loads or forces. O. Reg. 242/16, s. 11.

(6) Despite section 26.3, a guardrail system on a work platform shall meet the requirements of clause 6.4 (Guardrail System) of CSA Standard Z271-10, with the exception of clause 6.4.1 (b). O. Reg. 242/16, s. 11.

137.2 Design drawings for a work platform shall,

- (a) set out the size and specifications of all the components of the work platform, including the type and grade of all materials to be used;
- (b) state the maximum rated platform capacity of the work platform;
- (c) state welding specifications for all welds used on the work platform, including weld length, weld locations and welding fillers to be used; and
- (d) identify all critical welds used on the work platform. O. Reg. 242/16, s. 11.

137.3 (1) A work platform shall not be used unless the requirements of this section have been satisfied. O. Reg. 242/16, s. 11.

(2) In the case of a work platform designed before January 1, 2017, an engineer shall prepare a report that confirms that the structural integrity of the work platform is at least equal to the structural integrity of a work platform designed in accordance with sections 137 and 137.1. O. Reg. 242/16, s. 11.

(3) In the case of a work platform designed on or after January 1, 2017, an engineer shall prepare a report that,

- (a) confirms that the work platform meets the requirements of sections 137 and 137.1;
- (b) confirms that the suspended work platform's design and configuration have been tested to and meet the performance requirements set out in sections 7 to 11 of the ANSI/UL 1322-2004 Standard, "Fabricated Scaffold Planks and Stages", for the rated platform capacity and worst-case configurations;
- (c) provides the results of the tests described in clause (b);
- (d) subject to subsection (4), provides proof that the manufacturer of a suspended work platform or suspended work platform module has been certified to International Standard ISO 9001, Quality management systems – Requirements; and

- (e) includes, if required under subsection (4), the quality assurance report described in clause (4) (c). O. Reg. 242/16, s. 11.
- (4) If there is no proof available that the manufacturer has been certified to ISO 9001, an engineer shall,
 - (a) ensure that every critical weld of the work platform is subjected to a non-destructive test;
 - (b) examine all components of the work platform to ensure they are manufactured in accordance with the design drawings referred to in section 137.2;
 - (c) prepare a written quality assurance report that,
 - (i) confirms that every critical weld and every structural component referred to in subsection 139.1 (2) is correctly manufactured and has no defects, and
 - (ii) includes the results of non-destructive tests described in clause (a) and the examination described in clause (b). O. Reg. 242/16, s. 11.
- (5) The work platform shall be assembled in accordance with the manufacturer's instructions for assembly. O. Reg. 242/16, s. 11.
- (6) While a work platform is in use at a project, the employer shall,
 - (a) make available to an inspector on request, the design drawings for the work platform; and
 - (b) keep at the project and make available to an inspector on request, the report prepared under subsection (2) or (3) and the manufacturer's instructions for assembly of the work platform. O. Reg. 242/16, s. 11.

GENERAL REQUIREMENTS: WORKER TRAINING

138. (1) An employer shall ensure that a worker successfully completes a training program that meets the requirements set out in subsection (2) at the following times:

1. Before the worker uses a suspended work platform system or boatswain's chair for the first time.
 2. As often as is necessary, but at least every three years, after the worker uses a suspended work platform system or boatswain's chair for the first time. O. Reg. 242/16, s. 11.
- (2) The training program referred to in subsection (1) shall,

- (a) consist of adequate oral and written instruction for using a suspended work platform system or boatswain's chair, including instruction on,
 - (i) the regulations under the Act that apply to the work,
 - (ii) fall hazards related to the use of the suspended work platform system or boatswain's chair,
 - (iii) selecting, putting on, using and inspecting personal protective equipment, and its components, that the worker is required to wear,
 - (iv) identifying and using fixed supports for a suspended work platform system or boatswain's chair and for the worker's fall arrest system,
 - (v) the components, functions and limitations of a suspended work platform system or boatswain's chair, tiebacks and operational controls,
 - (vi) reading and using roof plans and work plans,
 - (vii) the load limitations of the suspended work platform system or boatswain's chair, and
 - (viii) elements of emergency rescue from a suspended work platform system or boatswain's chair; and
- (b) require the worker to demonstrate proficiency in,
 - (i) selecting, putting on, using and inspecting the personal protective equipment the worker is required to use,
 - (ii) rigging procedures and tying adequate knots,
 - (iii) locating fixed supports that are identified in a roof plan,
 - (iv) safely operating the suspended work platform system or boatswain's chair, and
 - (v) operating the controls of the suspended work platform system or boatswain's chair in accordance with the manufacturer's instructions. O. Reg. 242/16, s. 11.

(3) The employer shall ensure that the person who provides the training program referred to in subsection (1) prepares and signs a written record for every worker who successfully completes the program and shall provide such written proof to the worker. O. Reg. 242/16, s. 11.

- (4) A worker shall have the written proof described in subsection (3)

readily available at a project. O. Reg. 242/16, s. 11.

138.1 (1) An employer shall designate a competent worker to be responsible for the installation and inspection of a suspended work platform system or boatswain's chair before it is put into service for the first time. O. Reg. 242/16, s. 11.

(2) The employer shall ensure that the competent worker successfully completes a training program that meets the requirements set out in subsection (3) at the following times:

1. Before the competent worker installs or inspects the installation of a suspended work platform or boatswain's chair for the first time.
 2. As often as is necessary, but at least every three years, after the worker installs or inspects the installation of a suspended work platform or boatswain's chair for the first time. O. Reg. 242/16, s. 11.
- (3) The training program referred to in subsection (2) shall,
- (a) consist of adequate oral and written instruction on,
 - (i) rigging,
 - (ii) methods to secure beams and equipment,
 - (iii) fixed supports,
 - (iv) principles of suspension lines, hoisting devices and load limits,
 - (v) manufacturers' instructions for assembling, installing and disassembling suspended work platform systems or boatswain's chairs,
 - (vi) reading and using roof plans and work plans,
 - (vii) securing suspended work platform systems or boatswain's chairs to the face of a building, and
 - (viii) electrical systems; and
 - (b) require the competent worker to demonstrate proficiency in,
 - (i) installing and torqueing rigging hardware in accordance with the manufacturer's instructions,
 - (ii) inspecting cable and terminations in accordance with the manufacturer's instructions,
 - (iii) tying of adequate numbers of different knots,
 - (iv) properly setting up a suspended work platform system or

boatswain's chair in accordance with roof plans, work plans and the manufacturer's instructions, including,

- (A) selection and use of fixed supports,
- (B) set up of equipment,
- (C) use of hoists, including reeving cables,
- (D) use of descent controls and emergency controls,
- (E) impact of different work plans on set up of equipment, and
- (F) protection of public ways. O. Reg. 242/16, s. 11; O. Reg. 142/17, s. 16.

(4) The employer shall ensure that the person who provides the training program referred to in subsection (2) prepares and signs a written record for every competent worker who successfully completes the program and shall provide such written proof to the competent worker. O. Reg. 242/16, s. 11.

(5) A competent worker shall have the written proof described in subsection (4) readily available at a project. O. Reg. 242/16, s. 11.

GENERAL REQUIREMENTS: TESTING

139. (1) An employer shall ensure that, prior to the first use of a suspended work platform system at a project, the entire system, including its suspension lines, has been inspected, tested and maintained in accordance with this Regulation, the manufacturer's instructions, and clause 11 (Inspection and Testing) and Clause 12 (Maintenance) of CSA Standard Z271-10. O. Reg. 242/16, s. 11.

(2) The employer shall ensure that the inspection, testing and maintenance referred to in subsection (1) is completed by,

- (a) a competent worker; or
- (b) if the CSA Standard Z271-10 requires the inspection or test be performed by a person with specific qualifications, such person. O. Reg. 242/16, s. 11.

139.1 (1) Every supplier of and every employer who owns or uses a work platform shall ensure that the testing requirements in this section are met. O. Reg. 242/16, s. 11.

(2) For the purposes of this section, the types of structural components of a work platform are categorized in the following groups:

1. Group 1, which is composed of trusses, corner or angled sections and platform modules.
2. Group 2, which is composed of stirrups, module connectors and end frames. O. Reg. 242/16, s. 11.

(3) At least annually, a representative sample of each type of structural component shall be randomly selected and subjected to non-destructive testing in accordance with the following:

1. For each type of Group 1 structural component, the representative sample shall be composed of the number set out in Column 2 of the Table to this subsection opposite the total number of that type of component, set out in Column 1, in the supplier's or employer's entire inventory or fleet of suspended work platforms.
2. For each type of Group 2 structural component, the representative sample shall be composed of the number set out in Column 3 of the Table to this subsection opposite the total number of that type of component, set out in Column 1, in the supplier's or employer's entire inventory or fleet of suspended work platforms.
3. Every critical weld on each structural component selected as part of the representative sample shall be subjected to non-destructive testing.

Table

Item	Column 1 Total number of the type of structural component in a supplier or employer's entire inventory or fleet of suspended work platforms	Column 2 Group 1: number of representative samples of the type of structural component to be tested	Column 3 Group 2: number of representative samples of the type of structural component to be tested
1.	2-15	2	2
2.	16-50	3	5
3.	51-150	5	8
4.	151-500	8	13
5.	500 or greater	13	20

O. Reg. 242/16, s. 11.

(4) If any defect is found as a result of the testing conducted under subsection (3), an engineer shall review the interpretation of the test results to determine,

- (a) whether the defect affects the structural integrity of the structural component; and

- (b) if the defect does affect the structural integrity of the structural component, whether the defective component is to be rejected from further use permanently or pending its repair. O. Reg. 242/16, s. 11; O. Reg. 142/17, s. 17 (1).
- (5) The engineer shall prepare a written report of the review and determination made under subsection (4). O. Reg. 242/16, s. 11.
- (6) If a defective structural component is rejected from further use, either permanently or pending repair, a representative sample that is composed of four times the number of each type of structural component that composed the original representative sample under subsection (3) shall be subjected to testing described in paragraph 3 of subsection (3). O. Reg. 242/16, s. 11.
- (7) If any defect is found as a result of the testing conducted under subsection (6), subsections (4) to (6) apply, with necessary modifications. O. Reg. 242/16, s. 11; O. Reg. 142/17, s. 17 (2).
- (8) All other parts of a suspended work platform not listed in subsection (2) shall be inspected for damage at least once within the 12-month period preceding its use on a project and at least once annually while in use on a project. O. Reg. 242/16, s. 11.

GENERAL REQUIREMENTS: EQUIPMENT

- 140.** (1) An employer who uses a suspended work platform system shall ensure that there are permanent equipment logs respecting components of the suspended work platform system and that the logs,
- (a) comply with clause 13 (Equipment Log) of CSA Standard Z271-10; and
 - (b) include a record of the inspections, tests, repairs, modifications and maintenance performed on the components. O. Reg. 242/16, s. 11.
- (2) The employer shall make the permanent equipment logs available to an inspector on request. O. Reg. 242/16, s. 11.

PRE-USE REQUIREMENTS: FIXED SUPPORTS, ROOF PLANS, WORK PLANS AND INSTALLATION

- 141.** (1) The supplier of or employer who owns a suspended work platform system shall ensure that all of its components are marked or labelled in accordance with clause 10.2 (Markings) of CSA Standard Z271-10. O. Reg. 242/16, s. 11.
- (2) The supplier of or employer who owns a suspended work platform

system shall ensure that each of the following structural components of every work platform is marked with a unique identifier:

1. A truss.
2. An end frame.
3. A stirrup.
4. A module connector.
5. A corner or angled section. O. Reg. 242/16, s. 11.

(3) Despite subsection (2), if a work platform module is manufactured as a single unit, it may be marked with a single unique identifier. O. Reg. 242/16, s. 11.

141.1 (1) Every fixed support shall be designed by an engineer in accordance with the requirements of this section. O. Reg. 242/16, s. 11.

(2) A fixed support shall be designed and constructed to support all loads to which it may be subjected. O. Reg. 242/16, s. 11.

(3) The design of a fixed support shall use the factored loads calculated in accordance with subsection (4). O. Reg. 242/16, s. 11.

(4) The following values of load factors, as described in the provisions of the Building Code that address Limit States Design, shall be applied to calculate the factored loads for an outrigger and supporting structure, excluding anchorage connectors:

1. Live load factor = 3.0.
2. Dead load factor = 1.25. O. Reg. 242/16, s. 11; O. Reg. 142/17, s. 18.

(5) A component of a fixed support that may be subject to overturning shall be designed and constructed to support at least four times its allowable suspended load or force. O. Reg. 242/16, s. 11.

(6) Subject to subsection (7), an anchorage connector shall be designed to resist,

- (a) the application of 22.2 kilonewtons in any direction without fracture of any component or pullout from the fixed support; and
- (b) a test loading of 11.1 kilonewtons without permanent deformation of any component when subjected to the test loading in the direction or directions that generate the most critical effect on the fixed support with respect to stability and strength. O. Reg. 242/16, s. 11.

(7) For a suspended work platform system with a span between adjacent points of suspension of greater than 12 metres and up to 30 metres, the anchorage connectors for supporting the suspended work

platform system shall be designed in accordance with good engineering practice to support the allowable suspended load and the minimum live loads for the length of the suspended work platform to be used, as set out in subsection 137.1 (3). O. Reg. 242/16, s. 11.

141.2 (1) Every owner of a building or structure where a suspended work platform system or boatswain's chair is to be used shall ensure that there is a roof plan for the building or structure and ensure that the plan,

- (a) contains drawings and layout diagrams that show the positions of all fixed supports on the building or structure;
- (b) indicates whether the fixed supports are adequate for the purposes of attaching work platforms, boatswain's chairs and lifelines;
- (c) meets the requirements of clause 10.1.2 (Roof Plan) of CSA Standard Z271-10; and
- (d) has been approved in writing by an engineer. O. Reg. 242/16, s. 11.

(2) The owner shall post a legible copy of the roof plan near every entrance to the roof or top level of the building or structure where the suspended work platform system or boatswain's chair is to be used. O. Reg. 242/16, s. 11.

(3) The owner shall provide a copy of the roof plan to the constructor for a project at the building or structure. O. Reg. 242/16, s. 11.

(4) The constructor shall ensure that every employer whose workers are to use the suspended work platform system or boatswain's chair at the building or structure has received a copy of the roof plan. O. Reg. 242/16, s. 11.

(5) No employer or constructor shall permit a worker to use a suspended work platform system or boatswain's chair on a building or structure unless the employer or constructor has received a copy of the roof plan and, if required, the design drawings and written procedures prepared under subsection 141.3 (2). O. Reg. 242/16, s. 11.

141.3 (1) If the roof plan required under section 141.2 indicates that the fixed supports on the building or structure are not adequate for the purposes of attaching a suspended work platform system or boatswain's chair and lifelines, if any, the owner shall provide the constructor for a project at the building or structure with any structural drawings for the building or structure that the owner has control over. O. Reg. 242/16, s. 11.

(2) The constructor shall ensure that an engineer prepares, using any structural drawings provided by the owner under subsection (1), design

drawings and written procedures that indicate the manner in which the suspended work platform system or boatswain's chair and lifelines, if any, must be supported from the building or structure during the relevant project. O. Reg. 242/16, s. 11.

(3) The constructor shall ensure that every employer whose workers are to use the suspended work platform system or boatswain's chair and lifelines, if any, at the building or structure has received a copy of the design drawings and written procedures. O. Reg. 242/16, s. 11.

141.4 (1) The owner of a building or structure shall ensure that all fixed supports identified in the roof plan are inspected, maintained and tested in accordance with clause 11 (Inspection and Testing) of CSA Standard Z271-10 and the manufacturer's instructions. O. Reg. 242/16, s. 11.

(2) Without limiting the generality of subsection (1), the owner shall ensure that a fixed support identified in the roof plan is inspected by an engineer,

- (a) before being used for the first time after it is installed and after every time that it is repaired or modified;
- (b) as often as necessary and at least as often as recommended by the manufacturer of the fixed support;
- (c) at least once within the 12-month period preceding its use; and
- (d) if an engineer, an employer, a supervisor or a worker advises the owner that there are reasonable grounds to believe the fixed support is defective or not adequate to support the suspended work platform, boatswain's chair or lifeline. O. Reg. 242/16, s. 11.

(3) An owner who has been advised under clause (2) (d) shall ensure that the fixed support in question is not used until the requirements in subsections (4) and (5) are met, as applicable. O. Reg. 242/16, s. 11.

(4) The engineer who performs an inspection under subsection (2) shall prepare a written report that,

- (a) indicates whether the fixed support meets the requirements of section 141.1 and is adequate for the purposes of attaching a suspended work platform, boatswain's chair or lifeline; and
- (b) if the fixed support is not adequate, indicates the defects and hazardous conditions of the fixed support. O. Reg. 242/16, s. 11.

(5) A fixed support that has been identified in the report of the engineer as having a defect or hazardous condition shall not be used until the owner of the building or structure ensures that,

- (a) the defect or hazardous condition of the fixed support has been repaired, modified or corrected; and
 - (b) the fixed support has been inspected and tested by an engineer in accordance with clause 11.3.3 (Anchorage connectors) of CSA Standard Z271-10 and the engineer has determined the fixed support to be adequate to support a suspended work platform, boatswain's chair or lifeline. O. Reg. 242/16, s. 11.
- (6) The owner of the building or structure shall, respecting a fixed support,
- (a) keep a permanent record, in accordance with clause 13 (Equipment Log) of CSA Standard Z271-10, of all inspections, tests, repairs, modifications and maintenance of the fixed support as long as the fixed support is used;
 - (b) make the record available, on request, to an inspector; and
 - (c) make the record available, on request, to a constructor of a project where workers are to use a suspended work platform system or boatswain's chair and lifelines, if any. O. Reg. 242/16, s. 11.
- (7) No employer or constructor shall permit a worker to use a fixed support unless the employer or constructor has ensured that the fixed support has been inspected, maintained and tested as required by this section, and, if applicable, the requirements in subsections (4) and (5) are met. O. Reg. 242/16, s. 11.

141.5 (1) Before a suspended work platform system or boatswain's chair is put into service for the first time on a project, the employer shall ensure that a competent person,

- (a) prepares written procedures for the rescue of workers from a suspended work platform system or boatswain's chair in an emergency;
 - (b) conducts a risk assessment of the work to be undertaken to identify hazards that may arise from use of the suspended work platform system or boatswain's chair with reference to the nature of the workplace, the type of work and the conditions of work; and
 - (c) prepares a written, site-specific work plan that complies with subsection (2) and, if it is a work plan respecting a suspended work platform system, also complies with subsection (3). O. Reg. 242/16, s. 11.
- (2) A site-specific work plan for a suspended work platform system or boatswain's chair shall include, at a minimum,

- (a) measures and procedures to protect the health and safety of workers using the suspended work platform system or boatswain's chair;
- (b) procedures to install, move and dismantle the suspended work platform system or boatswain's chair;
- (c) an assessment as to whether the suspended work platform system or boatswain's chair can be installed according to a generic installation drawing or whether it must be installed according to a site-specific installation drawing;
- (d) the rated platform capacity of the suspended work platform, suspended work platform module or boatswain's chair;
- (e) the weight of all materials, tools and equipment allowed to be on the suspended work platform or boatswain's chair;
- (f) how all suspension lines and lifelines are to be attached to the fixed supports shown in any roof plan required under section 141.2;
- (g) an identification of the hazards related to material hoisting, cutting, grinding and sandblasting associated with the work;
- (h) an identification of all electrical hazards, including minimum distances when approaching electrical conductors;
- (i) protection for the public and workers who may be below the suspended work platform or boatswain's chair;
- (j) overhead protection for workers on a suspended work platform or boatswain's chair from any work being conducted above the suspended work platform or boatswain's chair;
- (k) measures to be taken to protect workers using a suspended work platform system or boatswain's chair from weather and other conditions that may endanger them;
- (l) a copy of the written procedures for the emergency rescue of workers from a suspended work platform or boatswain's chair in an emergency established under clause (1) (a);
- (m) the maximum number of workers allowed on a suspended work platform, suspended work platform module or boatswain's chair;
- (n) information about methods of fall protection, including installation, that may be used for the protection of workers using a suspended work platform or boatswain's chair; and
- (o) information about ready access to a two-way communication

system, such as radio, telephone or other similar means, to be provided to a worker using a suspended work platform system or boatswain's chair. O. Reg. 242/16, s. 11.

(3) In addition to the elements described in subsection (2), a site-specific plan for a suspended work platform system shall include, at a minimum,

- (a) how the work platform is to be arranged in any location at which the platform is to be used on the project;
- (b) a weight distribution plan to ensure loading across the work platform or suspended work platform module surface does not exceed the design capacity;
- (c) the maximum amount or weight of debris, grit and other materials allowed to accumulate on the suspended work platform, and their permissible locations on the work platform; and
- (d) an assessment as to whether a device may be used to transfer material to and from the work platform and, if it may, directions on how it is to be used. O. Reg. 242/16, s. 11.

(4) The employer shall keep at the project, and make available to an inspector on request, the site-specific work plan. O. Reg. 242/16, s. 11.

(5) The employer shall,

- (a) ensure that the site-specific work plan is implemented at the project; and
- (b) before a worker begins installing or using a suspended work platform system or boatswain's chair at the project, provide the worker with a copy of the site-specific work plan and review it with the worker. O. Reg. 242/16, s. 11.

141.6 (1) Only a designated competent worker who has successfully completed the training program under section 138.1 shall install, alter or dismantle a suspended work platform system or boatswain's chair. O. Reg. 242/16, s. 11.

(2) A suspended work platform system or boatswain's chair, including all components and connections of the suspended work platform system or boatswain's chair, shall be erected, installed, used and dismantled in accordance with the manufacturer's instructions and,

- (a) a generic installation drawing; or
- (b) in the case of a suspended work platform system, a site-specific drawing if not all of the requirements in the generic installation

drawing can be satisfied or if one of the circumstances set out in subsection (3) applies. O. Reg. 242/16, s. 11.

- (3) The following are circumstances for the purposes of clause (2) (b):
1. There will be stacked or tiered work platforms.
 2. There will be a work platform that, including its components, weighs more than 525 kilograms.
 3. There will be a work platform that has a span greater than 12 metres between adjacent points of suspension.
 4. There will be a work platform that has more than two primary suspension lines.
 5. More than two hoisting devices will be used to move a work platform.
 6. There will be a work platform that has any shielding, tarpaulin, enclosure, sign or banner on it that may increase the wind loads on the components of the suspended work platform system.
 7. The vertical distance between the top of a suspension line and the lowest point on the street, ground or other horizontal surface under a work platform will exceed 150 metres. O. Reg. 242/16, s. 11.

141.7 (1) This section applies if a generic installation drawing is used under clause 141.6 (2) (a). O. Reg. 242/16, s. 11.

(2) A designated competent worker who has successfully completed the training program under section 138.1 shall inspect a suspended work platform system or powered boatswain's chair to determine whether the installed suspended work platform system or installed powered boatswain's chair complies with the drawing,

- (a) before it is put into service after it has been installed for the first time on a project; and
- (b) if it is relocated at the project, at the new location before it is put into service. O. Reg. 242/16, s. 11.

(3) The designated competent worker shall provide a written report of the inspection indicating whether the installed suspended work platform system or installed powered boatswain's chair complies with the drawing. O. Reg. 242/16, s. 11.

(4) The suspended work platform system or powered boatswain's chair shall not be put into service unless the designated competent worker's

report indicates that the suspended work platform system or boatswain's chair has been installed in accordance with the drawing. O. Reg. 242/16, s. 11.

(5) While the suspended work platform system or powered boatswain's chair is at the project, the employer shall keep at the project, and make available to an inspector on request, the generic installation drawing and every report prepared by a designated competent worker under subsection (3). O. Reg. 242/16, s. 11.

141.8 (1) This section applies if a site-specific installation drawing is used under clause 141.6 (2) (b). O. Reg. 242/16, s. 11.

(2) The site-specific installation drawing shall be prepared by an engineer. O. Reg. 242/16, s. 11.

(3) An engineer shall inspect a suspended work platform system after it has been installed for the first time at a project and before it is put into service and shall prepare a written report indicating whether the suspended work platform system complies with the drawing. O. Reg. 64/18, s. 1.

(4) A suspended work platform system shall not be put into service unless the engineer's report indicates it has been installed in accordance with the drawing. O. Reg. 64/18, s. 1.

(5) If a suspended work platform system is relocated at a project, a deviation from the site-specific drawing is permitted if the deviation is approved by an engineer. O. Reg. 242/16, s. 11.

(6) A suspended work platform system shall not be put into service at the new location unless,

- (a) the suspended work platform system was inspected,
 - (i) if the installation at the new location was in accordance with the site-specific drawing, by either an engineer or by a designated competent worker who has successfully completed the training program under section 138.1, or
 - (ii) if the installation at the new location was in accordance with the site-specific installation drawing and a deviation from it was approved by an engineer, by an engineer; and
- (b) a report prepared under subsection (7) or (8) indicates that the suspended work platform system has been installed in accordance with the drawing and approved deviations, if any. O. Reg. 242/16, s. 11.

(7) In the case of an inspection under subclause 6 (a) (i), the engineer

or designated competent worker shall provide a written report of the inspection indicating whether the installed suspended work platform system complies with the drawing. O. Reg. 242/16, s. 11.

(8) In the case of an inspection under subclause 6 (a) (ii), the engineer shall provide a written report of the inspection indicating whether the installed suspended work platform system complies with the drawing and approved deviations. O. Reg. 242/16, s. 11.

(9) While the suspended work platform system is at the project, the employer shall keep at the project, and make available to an inspector on request, the site-specific installation drawing, any approved deviations and every report prepared under this section. O. Reg. 242/16, s. 11.

PROJECT-SPECIFIC USE REQUIREMENTS

142. The employer shall ensure that the rated platform capacity of a suspended work platform, work platform module or boatswain's chair is posted conspicuously on the suspended work platform, work platform module or boatswain's chair, as the case may be. O. Reg. 242/16, s. 11.

142.01 (1) A suspended work platform system or boatswain's chair and the suspension lines of the suspended work platform system or boatswain's chair shall be attached to a fixed support in accordance with the manufacturer's instructions. O. Reg. 242/16, s. 11.

(2) Every suspension line of a suspended work platform or boatswain's chair shall,

- (a) be made of wire rope, subject to subsection 142.03 (1);
- (b) be vertical from the fixed support, including the outrigger beam;
- (c) be parallel to every other suspension line, if any;
- (d) extend to the ground or have a positive stop that prevents the suspended work platform or boatswain's chair from running off the end of the suspension line or lines;
- (e) have each connecting end wrapped around a protective thimble and adequately fastened;
- (f) be capable, along with its attachment components, of supporting at least 10 times the maximum load to which it may be subjected; and
- (g) have fastenings and terminations that are,
 - (i) corrosion-resistant,
 - (ii) capable of developing at least 80 per cent of the rated

breaking strength of the suspension line itself,

- (iii) recommended by the manufacturer for use with suspended work platforms or boatswain's chairs, and
 - (iv) installed in accordance with the manufacturer's instructions.
- O. Reg. 242/16, s. 11.

(3) A U-type rope clamp shall not be used on a suspension line or tie-back. O. Reg. 242/16, s. 11.

(4) A hoisting device on a suspended work platform system or boatswain's chair shall,

- (a) have legible operating and safety instructions affixed to it in a conspicuous location; and
- (b) meet the requirements of clause 8 (Hoisting) of CSA Standard Z271-10. O. Reg. 242/16, s. 11.

(5) A suspended work platform system or boatswain's chair shall not be loaded in such a manner as to exceed the rated platform capacity for its work platform or individual platform module, or the rated hoist capacity. O. Reg. 242/16, s. 11.

(6) A work platform or boatswain's chair shall not be suspended or used at any time the wind speed exceeds 40 kilometres per hour. O. Reg. 242/16, s. 11.

(7) If an outrigger beam is to be used as a fixed support, it shall,

- (a) be tied back and securely fastened to the building or structure, or a component of the building or structure, by a secondary cable or wire rope capable of supporting the allowable suspended load;
- (b) be secured against horizontal and vertical movement;
- (c) have securely attached counterweights that are designed and manufactured for the purpose; and
- (d) have adequate legible instructions, provided by the manufacturer or an engineer, for the use of the counterweights affixed to the outrigger beam. O. Reg. 242/16, s. 11.

142.02 (1) All wire rope terminations of the suspension line of a suspended work platform system or boatswain's chair, including swaged socket and poured socket terminations, spliced eye terminations and turnback eye terminations shall, after installation onto the wire rope and prior to being used for the first time, be tested,

- (a) in accordance with the recommendations of the manufacturer of

the wire rope or termination; and

- (b) to no more than 50 per cent of the wire rope's nominal or minimum rated breaking strength. O. Reg. 242/16, s. 11.

(2) While the suspended work platform system or boatswain's chair is at the project and the termination remains in service, an employer shall keep at the project, and make available to an inspector on request, a record of the tests described in subsection (1). O. Reg. 242/16, s. 11.

(3) The wire rope termination of a suspension line shall be protected from contact with the line's hoisting device. O. Reg. 242/16, s. 11.

142.03 (1) The suspension line of a boatswain's chair shall be made of wire rope unless the boatswain's chair is equipped with a descent control device. O. Reg. 242/16, s. 11.

(2) Every suspension line of a boatswain's chair shall be protected from abrasion. O. Reg. 242/16, s. 11.

(3) Every suspension line of a boatswain's chair that is made of organic or polymer fibres shall be,

- (a) permanently marked with the date on which it was first put into use;
- (b) doubled from the fixed support of the line to the ground or egress level;
- (c) tested by a recognized testing laboratory two years after the date on which it was first put into use and then once every 12 months thereafter to assess whether,
 - (i) it has experienced abrasion, and
 - (ii) is capable of developing at least 80 per cent of the rated breaking strength of the suspension line itself; and
- (d) discarded,
 - (i) if the test required under clause (c) determines that it does not have a breaking strength of at least 10 times the static load that the line is intended to support,
 - (ii) in accordance with the manufacturer's recommendations, or
 - (iii) when it is no longer safe for use. O. Reg. 242/16, s. 11.

(4) A boatswain's chair shall have a seat or seating area that is at least 600 millimetres long and 250 millimetres wide. O. Reg. 242/16, s. 11.

- (5) If the seat or seating area is supported by a sling, the sling shall

be constructed of wire rope at least nine millimetres in diameter which crosses under the seat or sitting area. O. Reg. 242/16, s. 11.

(6) If a boatswain's chair has a descent control device,

- (a) the distance between the boatswain's chair and the fixed support shall not exceed 90 metres; and
- (b) a worker on the boatswain's chair shall not use a corrosive substance, or mechanical grinding or flame-cutting equipment if the suspension line is not made of wire rope. O. Reg. 242/16, s. 11.

142.04 (1) Before a suspended work platform system or boatswain's chair is used for the first time each day, a competent worker shall identify any defects or hazardous conditions and document them in writing. O. Reg. 242/16, s. 11.

(2) The suspended work platform system or boatswain's chair shall not be used until the defects or hazardous conditions have been corrected or removed. O. Reg. 242/16, s. 11.

(3) The employer shall keep a copy of each document prepared by a competent worker under subsection (1) and make it available to an inspector on request. O. Reg. 242/16, s. 11.

142.05 (1) An employer shall ensure that a competent worker performs a functional test of a work platform or powered boatswain's chair to ensure that it is operating in accordance with the manufacturer's instructions,

- (a) before it is used for the first time after it is installed at the project;
- (b) if it is relocated at the project, at the new location before it is put into service; and
- (c) before it is used for the first time each day. O. Reg. 242/16, s. 11.

(2) If a functional test performed under subsection (1) reveals defects or hazardous conditions, the work platform or powered boatswain's chair shall not be used until the defects or hazardous conditions have been corrected or removed. O. Reg. 242/16, s. 11.

(3) The work platform or powered boatswain's chair shall not be raised more than 30 centimetres during the functional test unless it has a hoisting device equipped with a remote operating device. O. Reg. 242/16, s. 11.

142.06 (1) A worker who is on or is getting on or off a suspended work platform or boatswain's chair shall wear a full body harness connected to a fall arrest system. O. Reg. 242/16, s. 11; O. Reg. 471/16, s. 1.

(2) Every worker on a suspended work platform or boatswain's chair shall have an effective means of summoning assistance in case of emergency. O. Reg. 242/16, s. 11.

(3) Every lifeline used with a suspended work platform or boatswain's chair shall,

- (a) be suspended independently of the suspended work platform or boatswain's chair;
 - (b) be securely attached to a fixed support so that the failure of the suspended work platform or boatswain's chair will not cause the lifeline to fail;
 - (c) be protected from damage and abrasion; and
 - (d) if subject to wind conditions,
 - (i) not be suspended a vertical distance of more than 150 metres below the fixed support, and
 - (ii) if suspended a vertical distance of more than 100 metres below the fixed support, be restrained at or near the midpoint.
- O. Reg. 242/16, s. 11.

(4) Despite clauses (3) (a) and (b), the lifeline may be securely fastened to a work platform if,

- (a) all or part of the suspended work platform has more than one means of suspension; and
- (b) the suspended work platform is designed, assembled and maintained such that the failure of one means of suspension will not result in the complete or partial collapse of the suspended work platform. O. Reg. 242/16, s. 11.

(5) A suspended work platform shall have hangers located at least 150 millimetres but no more than 450 millimetres from the ends of the platform that are securely attached to it. O. Reg. 242/16, s. 11.

(6) If the suspension height of a suspended work platform is 15 metres or greater, the suspended work platform shall, if practicable, be restrained to the exterior face of the building or structure that it is suspended from unless the suspended work platform is being raised or lowered. O. Reg. 242/16, s. 11.

(7) If a suspended work platform is stationary and its guardrail adjacent to the face of the building or structure has been removed or lowered, the suspended work platform shall be restrained to the building or structure. O. Reg. 242/16, s. 11.

MULTI-POINT SUSPENDED WORK PLATFORMS

142.1 Sections 142.2 to 142.8 apply to every multi-point suspended work platform. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

142.2 (1) A multi-point suspended work platform and all its components shall be designed by an engineer in accordance with good engineering practice and with this section. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

(2) A multi-point suspended work platform shall be designed to support, in addition to its dead load, live loads uniformly distributed over the platform surface of at least,

- (a) 2.4 kilonewtons per square metre if the platform is to be used for masonry work;
- (b) 3.6 kilonewtons per square metre if the platform is to be used for demolition work or for storage of masonry units or other related material or equipment; or
- (c) 1.2 kilonewtons per square metre in any other case. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

(3) In addition to the loads specified in subsection (2), a multi-point suspended work platform shall be able to support or resist,

- (a) 1.1 kilonewtons concentrated on an area measuring 0.3 metres by 0.3 metres that is located on the platform at the position having the most adverse effect on the component under consideration;
- (b) the wind load determined in accordance with the applicable provisions of the Building Code, based on a one in ten probability of being exceeded in any one year; and
- (c) any other loads likely to be applied to it. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1); O. Reg. 142/17, s. 19 (1).

(4) The wind load referred to in clause (3) (b) may be reduced by 30 per cent if the engineer who designs the multi-point suspended work platform determines that it is appropriate to do so and indicates in writing that he or she has made the determination. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 12 (1).

(5) Subject to clause (2) (c) and subsections (3) and (4), the engineer who designs the multi-point suspended work platform shall determine the minimum specified loads for erecting, dismantling, traversing or otherwise moving the multi-point suspended work platform. O. Reg. 242/16, s. 12 (2).¶

(6) If a multi-point suspended work platform is to be used for abrasive

blasting operations, there shall be an additional load allowance for the accumulation of grit on the platform to a depth of at least 25 millimetres. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

(7) Subject to subsection (8), in designing a multi-point suspended work platform and its structural members, the following values of load factors, as described in the applicable provisions of the Building Code related to Limit States Design, shall be applied to the load requirements referred to in subsections (2) to (6):

1. Live load factor = 3.0.
2. Dead load factor = 1.5.
3. Wind load factor = 1.5. O. Reg. 142/17, s. 19 (2).

(8) In designing the suspension and anchorage system of a multi-point suspended work platform,

- (a) the value of the live load factor shall be 4.0;
- (b) the value of the dead load factor shall be 2.0; and
- (c) the value of the wind load factor shall be 2.0. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1); O. Reg. 142/17, s. 19 (3).

(9) Despite subsections (7) and (8), a multi-point suspended work platform and its components may be designed by working stress design if the safety factors for the multi-point suspended work platform and the structural members are at least equal to what would otherwise be provided under those subsections. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1), 12 (3).

(10) Despite subsections (7) and (8), if the failure load of a component has been determined by testing, the minimum safety factors shall be,

- (a) 3.0 for components of the multi-point suspended work platform;
- (b) 4.0 for components of the suspension and anchorage system; and
- (c) 10.0 for wire ropes, cables or chains used for hoisting, traversing or otherwise moving the multi-point suspended work platform. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

(11) The failure load of a component referred to in subsection (10) shall be verified in writing by an engineer. O. Reg. 85/04, s. 15.

(12) A multi-point suspended work platform shall be designed, constructed and maintained in such a way that,

- (a) the failure of one means of support or suspension will not cause

any part of the platform to collapse or fail, under the most adverse loading condition as determined by the engineer who designs the multi-point suspended work platform; and¶

- (b) compliance with subsections (7), (8), (9) and (10) is maintained in all fixed and moving conditions. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1), 12 (4).

(13) The design of a multi-point suspended work platform shall include adequate movement-limiting devices to be used when traversing or otherwise moving it. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

(14) Before a multi-point suspended work platform is erected, the constructor shall ensure that the engineer responsible for the structural integrity of the permanent building or structure from which the multi-point suspended work platform is suspended provides a written report approving the design loads imposed on the building or structure by the multi-point suspended work platform. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1), 12 (5).

(15) Design drawings for a multi-point suspended work platform shall include,

- (a) a statement by the engineer that the design meets the requirements of this Regulation;
- (b) the size and specifications of all components, including the type and grade of all materials to be used;
- (c) the load factors and safety factors for the multi-point suspended work platform and all its components;
- (d) all the specified loads, including the loads during erection, dismantling, traversing and otherwise moving; and
- (e) the procedures for erection, dismantling, traversing and otherwise moving. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1), 12 (5).

(16) The design drawings shall be followed, subject to subsection (17). O. Reg. 85/04, s. 15.

(17) A deviation from the design drawings is permitted if the deviation,

- (a) is approved, in advance and in writing, by an engineer; and
- (b) complies with this Regulation. O. Reg. 85/04, s. 15.

142.3 (1) Before erecting or dismantling a multi-point suspended work platform, the constructor shall give notice, in person, by telephone, by fax or by electronic means, to the Ministry office located nearest the project.

O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

(2) A multi-point suspended work platform shall be inspected by an engineer to determine whether it complies with the design drawings, or the design drawings subject to any deviations approved under subsection 142.2 (17), as the case may be,

- (a) after it is erected but before it is first used; and
- (b) if the multi-point suspended work platform is moved to another anchorage position, before it is used there. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1), 13.

(3) The inspection under subsection (2) shall include a determination of whether all components are in adequate condition. O. Reg. 85/04, s. 15.

(4) The engineer who conducts the inspection under subsection (2) shall prepare a written report of the inspection. O. Reg. 85/04, s. 15.

- (5) The written report is a positive report if it indicates that,
 - (a) the multi-point suspended work platform complies with the design drawings, or the design drawings subject to any deviations approved under subsection 142.2 (17), as the case may be; and
 - (b) all components are in adequate condition. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

(6) Subsections (1), (2), (3), (4) and (5) do not apply to a multi-point suspended work platform whose platform area is six square metres or less. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

(7) A competent worker shall inspect a multi-point suspended work platform each day before it is used. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

142.4 The constructor shall keep at the project a copy of,

- (a) the written report under subsection 142.2 (14);
- (b) the design drawings under subsection 142.2 (15);
- (c) any written approvals under subsection 142.2 (17); and
- (d) the written reports under subsection 142.3 (4). O. Reg. 85/04, s. 15.

142.5 (1) A multi-point suspended work platform shall be erected, dismantled, traversed or otherwise moved only by a competent worker under the supervision of a competent person and in accordance with

the design drawings, or the design drawings subject to any deviations approved under subsection 142.2 (17), as the case may be. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

(2) Before a worker is on a multi-point suspended work platform for the first time, the employer shall provide the worker with adequate oral and written instructions for using the multi-point suspended work platform, including,

- (a) the manufacturer's instructions or an engineer's instructions;
- (b) instructions on the load limitations;
- (c) instructions in, and a hands-on demonstration of, the proper operation of the multi-point suspended work platform. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1), 13.

(3) A worker who is to erect, dismantle, traverse or otherwise move a multi-point suspended work platform shall, in addition to the instructions set out in subsection (2), be given instructions in the procedures described in clause 142.2 (15) (e). O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

(4) No person shall use a multi-point suspended work platform until the design drawings described in subsection 142.2 (15) have been given to the constructor and the following documents have been prepared and given to the constructor:

- 1. The report described in subsection 142.2 (14).
- 2. A positive report described in subsections 142.3 (4) and (5), if applicable.
- 3. Any approval described in subsection 142.2 (17), if applicable. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1).

142.6 (1) A multi-point suspended work platform shall not be loaded in excess of the specified loads indicated on the design drawings for the multi-point suspended work platform. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1), 13.

(2) Signs indicating the specified live loads shall be posted in conspicuous places on the multi-point suspended work platform. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 13.

142.7 (1) A worker who is on a multi-point suspended work platform while it is being erected, dismantled, traversed or otherwise moved shall use a fall arrest system that is,

- (a) connected to a fixed support independent from the multi-point suspended work platform; and

(b) designed, constructed and maintained in accordance with this Regulation. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1), 13.

(2) Despite subsection (1), a worker is not required to use a fall arrest system while the multi-point suspended work platform is stationary if guardrails are installed in accordance with section 26.3. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 13.

142.8 (1) The constructor of a project where a multi-point suspended work platform is used shall keep a written record of all inspections, tests, repairs, modifications and maintenance performed on the multi-point suspended work platform and make copies of the record available to an inspector upon request. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 1 (1), 13.

(2) The record referred to in subsection (1) shall,

(a) be kept up to date;

(b) include the signature, name and business address of each person who performs an inspection, test, repair, modification or maintenance; and

(c) be kept at the project while the multi-point suspended work platform is there. O. Reg. 85/04, s. 15; O. Reg. 242/16, s. 13.

ELEVATING WORK PLATFORMS

143. (1) Subject to subsection (2), every elevating work platform, including elevating rolling work platforms, self-propelled elevating work platforms, boom-type elevating work platforms and vehicle-mounted aerial devices shall comply with section 144. O. Reg. 213/91, s. 143 (1).

(2) Subsection (1) does not apply to,

(a) suspended scaffolds or suspended work platforms; and

(b) buckets or baskets suspended from or attached to the boom of a crane. O. Reg. 213/91, s. 143 (2).

144. (1) An elevating work platform shall be designed by an engineer in accordance with good engineering practice,

(a) to meet the requirements of the applicable National Standards of Canada standard, set out in the Table to subsection (6); and

(b) to support a minimum of 1.3 kilonewtons rated working load as determined in accordance with the applicable National Standards of Canada standard set out in the Table to subsection (6). O. Reg. 213/91, s. 144 (1).

(2) An elevating work platform shall be manufactured in accordance

with the design referred to in subsection (1). O. Reg. 213/91, s. 144 (2).

(3) An elevating work platform,

(a) shall be tested in accordance with the National Standards of Canada standard set out in the Table to subsection (6); and

(b) shall be inspected each day before use, in accordance with the manufacturer's instructions by a worker trained in accordance with section 147. O. Reg. 213/91, s. 144 (3).

(4) An elevating work platform shall only be used if an engineer has certified in writing that it complies with the National Standards of Canada standard set out in the Table to subsection (6). O. Reg. 213/91, s. 144 (4).

(5) The certification required by subsection (4) shall include the details of testing. O. Reg. 213/91, s. 144 (5).

(6) The National Standards of Canada standard applicable to the type of elevating work platform listed in Column 1 of the Table to this subsection are the standards set out opposite it in Column 2:

TABLE

Item	Column 1 Type of elevating work platform	Column 2 National Standards of Canada standard
1.	Elevating Rolling Work Platform	CAN3-B354.1-M82
2.	Self-Propelled Elevating Work Platform	CAN3-B354.2-M82 and CAN3 B354.3-M82
3.	Boom-Type Elevating Work Platform	CAN3-B354.4-M82
4.	Vehicle-Mounted Aerial Device	CAN/CSA-C225-10

O. Reg. 213/91, s. 144 (6); O. Reg. 345/15, s. 17.

(7) An elevating work platform shall be equipped with guardrails. O. Reg. 213/91, s. 144 (7).

(8) An elevating work platform shall have signs that are clearly visible to an operator at its controls indicating,

(a) the rated working load;

(b) all limiting operating conditions including the use of outriggers, stabilizers and extendable axes;

(c) the specific firm level surface conditions required for use in the elevated position;

(d) such warnings as may be specified by the manufacturer;

- (e) other than for a boom-type elevating work platform, the direction of machine movement for each operating control;
- (f) the name and number of the National Standards of Canada standard to which it was designed; and
- (g) the name and address of the owner. O. Reg. 213/91, s. 144 (8).

145. (1) The owner of an elevating work platform shall maintain it such that the safety factors of the original design are maintained. O. Reg. 213/91, s. 145 (1).

(2) The owner of an elevating work platform shall keep a permanent record of all inspections, tests, repairs, modifications and maintenance performed on it. O. Reg. 213/91, s. 145 (2).

(3) The permanent record required by subsection (2),

- (a) shall be kept up-to-date;
- (b) shall include complete records from the more recent of,
 - (i) the date of purchase, or
 - (ii) May 10, 1991; and
- (c) shall include the signature and name of the person who performed the inspection, test, repair, modification or maintenance. O. Reg. 213/91, s. 145 (3); O. Reg. 142/17, s. 20.

146. A maintenance and inspection record tag,

- (a) shall be provided and attached to the elevating work platform near the operator's station; and
- (b) shall include,
 - (i) the date of the last maintenance and inspection,
 - (ii) the signature and name of the person who performed the maintenance and inspection, and
 - (iii) an indication that the maintenance has been carried out in accordance with the manufacturer's recommendations. O. Reg. 213/91, s. 146.

147. (1) A worker who operates an elevating work platform shall, before using it for the first time, be given oral and written instruction on the operation and be trained to operate that class of elevating work platform. O. Reg. 213/91, s. 147 (1).

(2) The instruction and training required by subsection (1) shall include,

- (a) the manufacturer's instruction;
- (b) instruction in the load limitations;
- (c) instruction in and a hands-on demonstration of the proper use of all controls; and
- (d) instruction in the limitations on the kinds of surfaces on which it is designed to be used. O. Reg. 213/91, s. 147 (2).

148. (1) An elevating work platform,

- (a) shall not be loaded in excess of its rated working load;
- (b) shall be used and moved only in accordance with the manufacturer's written instructions;
- (c) shall not be loaded or used in such a manner as to affect its stability or endanger a worker;
- (d) shall not be moved unless all workers on it are protected from ejection by being attached to an adequate anchorage point on the elevating work platform by a method of fall protection; and
- (e) shall not be used, in the case of a self-propelled or vehicle-mounted boom-type elevating work platform or a vehicle-mounted aerial device, unless all workers on it are attached to an adequate anchorage point on the elevating work platform by a method of fall protection. O. Reg. 345/15, s. 18; O. Reg. 242/16, s. 14 (1); O. Reg. 142/17, s. 21.

(2) Clause (1) (d) does not apply to,

- (a) a mast climbing work platform or a mast climbing transport platform if the platform has guardrails protecting all open sides of the platform where a worker is exposed to a hazard of falling 2.4 metres or more; and
- (b) a vehicle-mounted aerial device if the non-conductive requirements of the basket prevent the placement of an anchorage attachment inside the basket. O. Reg. 242/16, s. 14 (2).

(3) REVOKED: O. Reg. 242/16, s. 14 (2).

149. An operator's manual for an elevating work platform shall be kept with it while it is on a project. O. Reg. 213/91, s. 149.

CRANES, HOISTING AND RIGGING

149.1 In sections 150 to 164,

"CSA Standard Z248-17" means CSA Standard Z248-17, Code for Tower

Cranes; (“norme CSA Z248-17”)

“CSA Standard Z150-16” means CSA Standard Z150-16, Safety Code on Mobile Cranes; (“norme CSA Z150-16”)

“CSA Standard Z150.3-17” means CSA Standard Z150.3-17, Safety Code on Articulating Boom Cranes. (“norme CSA Z150.3-17”) O. Reg. 241/23, s. 5.

150. (1) Subject to subsection (2), no worker shall operate a crane or similar hoisting device unless the worker holds a certificate of qualification issued under the Ontario College of Trades and Apprenticeship Act, 2009, that is not suspended, or the worker is an apprentice and is working pursuant to a training agreement registered under that Act, that is not suspended, in the trade of,

- (a) hoisting engineer — mobile crane operator 1, if the worker is operating a mobile crane or similar hoisting device capable of raising, lowering or moving any material that weighs more than 30,000 pounds;
- (b) hoisting engineer — mobile crane operator 1 or hoisting engineer — mobile crane operator 2, if the worker is operating a mobile crane or similar hoisting device capable of raising, lowering or moving only material that weighs more than 16,000 pounds but no more than 30,000 pounds; or
- (c) hoisting engineer — tower crane operator, if the worker is operating a tower crane. O. Reg. 88/13, s. 1.

(1.1) REVOKED: O. Reg. 241/23, s. 6(2)

(2) No worker shall operate a crane or other hoisting device, other than one described in subsection (1), unless,

- (a) the worker is trained in the safe operation of the crane or other hoisting device; or
- (b) the worker is being instructed in the operation of the crane or other hoisting device and is accompanied by a person who meets the requirements of clause (a). O. Reg. 241/23, s. 6 (3).

(3) A worker shall carry the worker’s written proof of training while operating a crane or other hoisting device. O. Reg. 241/23, s. 6 (3).

151. (1) No crane or similar hoisting device shall be subjected to a load greater than its rated load-carrying capacity, other than during load tests required by the manufacturer. O. Reg. 241/23, s. 7 (1).

(2) The manufacturer of a crane or similar hoisting device or an engineer

shall determine its rated load-carrying capacity in accordance with,

(a) for a mobile crane, CSA Standard Z150-16 or CSA Standard Z150.3-17; and

(b) for a tower crane, CSA Standard Z248-17.

(3) Every crane or similar hoisting device shall have affixed to it,

(a) a load rating chart that the operator can read while at the controls that contains enough information for the operator to determine the load that can be lifted for each configuration of the crane or hoisting device; or

(b) a plate with the crane model and serial number or other traceable method that can be used in conjunction with crane-specific load charts that the operator can read while at the controls of the crane while it is in use. O. Reg. 241/23, s. 7 (3).

(3.1) If an operator is using a remote control device, they shall have access to a load rating chart at all times. O. Reg. 241/23, s. 7 (3).

(4) A luffing boom crane shall have a boom angle indicator that the operator can read while at the controls. O. Reg. 241/23, s. 7 (4).

152. (1) The owner of a crane or similar hoisting device shall keep an owner's crane log consisting of a record of all inspections of, tests of, repairs to, modifications to and maintenance of the crane or similar hoisting device. O. Reg. 241/23, s. 8.

(2) If the owner's crane log does not include all the information required under subsection (1), the owner shall ensure that, before a crane is put into service at a project, an inspection of the crane or similar hoisting device is completed pursuant to the inspection requirements for tower cranes in clause 6.4.7 of CSA Standard Z248-17 and the inspection requirements for mobile cranes in clause 5.3.5 of CSA Standard Z150-16, as applicable, and the results of the inspection shall be added to the owner's crane log. O. Reg. 241/23, s. 8.

(3) Before a crane or similar hoisting device is put into service at a project, the owner of the crane or similar hoisting device shall provide to the operator,

(a) a record of the information referred to in subsection (1) for at least the previous 12 months; and

(b) an operator's crane log to be used for the period that the crane or similar hoisting device is at the project. O. Reg. 241/23, s. 8.

(4) While a crane or similar hoisting device is at a project, the operator of the crane or similar hoisting device shall keep an operator's crane log

consisting of a record of all inspections of, tests of, repairs to, modifications to and maintenance of the crane or similar hoisting device. O. Reg. 241/23, s. 8.

(5) The operator's crane log shall be,

- (a) kept with the crane or similar hoisting device while it is at the project;
- (b) transferred to the owner for addition to the owner's crane log after the crane has been dismantled or removed from the project. O. Reg. 241/23, s. 8.

(6) The owner of a crane or similar hoisting device shall retain the owner's crane log and make a copy of it available to the constructor, employer and any persons designated by the constructor or the employer, on request. O. Reg. 241/23, s. 8.

153. (1) No worker shall use as a workplace a platform, bucket, basket, load, hook, sling or similar device that is capable of moving and is suspended from or supported by a direct attachment to the boom of a crane or similar hoisting device, or supported by a cable attached to a crane or similar hoisting device, except in accordance with this section. O. Reg. 241/23, s. 9 (1).

(2) A crane may be used to raise, support or lower a worker only if,

- (a) conventional access equipment cannot be used;
- (b) the platform that the worker is on,
 - (i) is designed by an engineer in accordance with good engineering practice,
 - (ii) is constructed in accordance with the design drawings,
 - (iii) is equipped with a secondary means of suspension or support that is secured above the hook and does not impede the hoist line,
 - (iv) is equipped with anchor points for the attachment of the worker's fall arrest systems,
 - (v) is equipped with a guardrail in accordance with section 26.3,
 - (vi) is suspended from, or supported by, a direct attachment to the boom of the crane,
 - (vii) is designed, constructed and maintained so that the failure of one means of support or suspension will not cause the collapse of all or part of the platform, and

(viii) has its maximum rated load capacity legibly and permanently marked in a conspicuous place on it; and

(c) the crane,

(i) is equipped with fail-safe mechanisms that will prevent the boom and the suspended platform from free falling in the event of a power source or system failure or the inadvertent release of any operating controls,

(ii) is not used to hoist material while the platform is being used to support a worker,

(iii) is not loaded in excess of 25 per cent of its maximum rated load,

(iv) has a revised load rating chart prepared by an engineer in accordance with good engineering practice that is affixed to the crane or otherwise available to the operator at the controls of the crane while in use,

(v) has, on its hoist line, hooks equipped with self-closing safety catches at the point where the platform is suspended, and

(vi) is equipped with an automatic limit switch that prevents the platform and load from reaching beyond the highest permissible position specified by the crane manufacturer. O. Reg. 631/94, s. 4; O. Reg. 527/00, s. 5.

(3) Any modifications or repairs to the boom of the crane shall be made in accordance with the instructions of the crane manufacturer or an engineer. O. Reg. 631/94, s. 4.

(4) Every worker on the platform shall wear a full body harness connected independently to anchor points on the platform and used in conjunction with a lanyard fitted with a shock absorber. O. Reg. 631/94, s. 4.

(5) The design drawings of the platform shall,

(a) set out the size and specifications of all components of the platform, including the type and grade of materials used for it;

(b) state the maximum live load of the platform;

(c) specify the model and type of crane to be used in conjunction with the platform; and

(d) include a statement that, in the opinion of the engineer who designed the platform, the design meets the requirements of

clauses (a), (b) and (c).

(e) REVOKED: O. Reg. 85/04, s. 16.

O. Reg. 631/94, s. 4; O. Reg. 85/04, s. 16.

(6) Before the platform is used, a competent worker shall inspect it and verify in writing that it has been constructed in accordance with the design drawings. O. Reg. 631/94, s. 4.

(7) No person shall use the platform until the verification required under subsection (6) is given. O. Reg. 631/94, s. 4.

(8) Before the crane is first used to lift persons, and at least once every 12 months after the first test, an engineer shall ensure that the crane be subjected to non-destructive testing to ensure the structural integrity of the crane. O. Reg. 242/16, s. 15.

(9) A competent worker shall inspect the crane's structural elements and the rigging equipment for defects before each use of the crane. O. Reg. 631/94, s. 4.

(10) The employer shall ensure that an adequate means of communication between the worker on the platform and the crane operator is established, maintained and used. O. Reg. 631/94, s. 4.

(11) Before beginning any hoisting operation under this section for the first time at a project, the constructor shall notify an inspector at the Ministry office located nearest to the project. O. Reg. 241/23, s. 9 (5).

(12) The employer shall ensure that every worker involved with the hoisting operation receives adequate instructions about the requirements, restrictions and hazards associated with the hoisting operation. O. Reg. 631/94, s. 4.

(13) The employer shall develop adequate emergency rescue procedures and communicate these in writing to all workers involved with the hoisting operation. O. Reg. 631/94, s. 4.

(14) The constructor shall keep all design drawings, test reports, written statements and certification documents required under this section with the crane at all times during the hoisting operation. O. Reg. 631/94, s. 4.

(15) On request, the constructor shall provide an inspector with copies of any document described in subsection (14). O. Reg. 631/94, s. 4.

154. (1) A crane or similar hoisting device shall be set up, assembled, climbed, erected, extended and dismantled only by a competent worker acting in accordance with the written instructions of the manufacturer and in such a manner as to not endanger any person or property. O. Reg.

213/91, s. 154 (1).

(2) No crane or similar hoisting device shall include sections that are not designed for it or that are damaged. O. Reg. 213/91, s. 154 (2).

(3) No crane or similar hoisting device shall include nuts, bolts, pins or fastenings that are not the size and quality specified by the manufacturer. O. Reg. 213/91, s. 154 (3).

(4) Every portable or removable counterweight, test block and ballast used on a crane must be accurately weighed and have their weight clearly marked on them. O. Reg. 241/23, s. 10 (2).

155. Unless otherwise specified by its manufacturer, a crane or similar hoisting device,

(a) shall be equipped with a device to indicate whether its turntable is level; and

(b) shall be operated with its turntable level. O. Reg. 213/91, s. 155.

156. An outrigger or stabilizing device used on a crane or other hoisting device,

(a) shall be extended to meet load rating chart requirements;

(b) shall rest on blocking able to support the crane or other hoisting device and its maximum load without failure and without deformation or settlement which affects its stability; and

(c) shall be set up only after the ground bearing pressure has been considered by the operator. O. Reg. 241/23, s. 11.

ROTARY FOUNDATION DRILL RIGS

156.1 (1) Before the start of any drilling operation on a project with a rotary foundation drill rig,

(a) an inspection of the work area shall be conducted to identify,

(i) potential hazards, including utilities, services, obstructions, structures and soil conditions that may endanger a worker engaged in, or in the vicinity of, the drilling operation, and

(ii) buildings and structures adjacent to, or in the vicinity of, the drilling operation that may be affected by it;

(b) any hazards identified under subclause (a) (i) shall be removed if practicable;

(c) if it is not practicable to remove the hazards identified under subclause (a) (i),

- (i) if practicable, they shall be disconnected or inactivated so as not to endanger workers engaged in, or in the vicinity of, the drilling operation, and
- (ii) they shall be located and marked by signs; and
- (d) a written report shall be prepared that indicates,
 - (i) all of the hazards identified under subclause (a) (i),
 - (ii) which hazards have not been removed, and
 - (iii) which hazards have been disconnected or inactivated. O. Reg. 345/15, s. 19.

(2) The constructor shall keep a copy of the report mentioned under clause (1) (d) at the project until the drilling operation is completed, and make the report available, upon request, to an inspector and an employer responsible for the drilling operation. O. Reg. 345/15, s. 19.

156.2 (1) Before a drilling operation begins, the employer responsible for it shall,

- (a) develop written measures and procedures in accordance with subsection (2) to protect the health and safety of workers engaged in, or in the vicinity of, the drilling operation; and
- (b) have a copy of these written measures and procedures provided to, and reviewed with, the workers engaged in the drilling operation. O. Reg. 345/15, s. 19.

(2) The written measures and procedures required under subsection (1) shall include, at a minimum, details of,

- (a) the measures and procedures to be implemented to protect workers from all unremoved hazards;
- (b) the procedures to be implemented for the assembly, erection, disassembly, alteration and operation of the drilling equipment;
- (c) the safe work areas that have been designated for,
 - (i) the drilling operation,
 - (ii) the staging, disassembly and alteration of the drilling equipment, and
 - (iii) the storage of any excavated soil and material;
- (d) the procedures to be implemented for removing excavated soil and material;

- (e) the restricted access zone that has been designated around the drilling operation to restrict or prevent access by persons or equipment;
- (f) the fall protection measures, in addition to those required under sections 26.1 to 26.9, to be implemented to prevent workers from falling into a drill hole or being engulfed by collapsing soil around a drill hole, while or after the hole is drilled; and
- (g) the communications system to be used among the drill rig operator, the drill rig front-end worker and other workers in the restricted access zone, or a system of prearranged visual signals to be used among them if those signals are clearly visible and understood by them. O. Reg. 345/15, s. 19.

(3) Workers shall follow the written measures and procedures. O. Reg. 345/15, s. 19.

156.3 Sections 156.4 and 156.5 apply when a drilling operation at a project uses a rotary foundation drill rig that can exert a ground pressure of 200 kiloPascals or more under its tires, crawlers or outrigger pads in any configuration, including during its operational activities. O. Reg. 345/15, s. 19.

156.4 (1) Before a drilling operation described in section 156.3 begins, an engineer shall,

- (a) design a supporting surface for the drill rig in accordance with good engineering practice to adequately support the drill rig during all drilling and drill rig set-up activities;
- (b) designate and design a path of travel for the drill rig to use on the project to ensure the path of travel safely supports the drill rig; and
- (c) prepare a written report described in subsection (2). O. Reg. 345/15, s. 19.

(2) The written report required under clause (1) (c) shall include, at a minimum, details of,

- (a) the project and its location;
- (b) the designs and specifications for the supporting surface and path of travel;
- (c) any operating restrictions imposed by the drill rig manufacturer's instructions, including the maximum safe ground slope for the drilling operation;
- (d) the existing soil conditions, all associated hazards to workers' health

and safety and the precautions to be taken to protect workers from the hazards associated with the soil conditions;

- (e) the minimum load-bearing capacity of the supporting surface required for each activity to be undertaken by the drill rig;
- (f) the surface preparation required for the supporting surface and path of travel to safely support the drill rig during its operation and travel;
- (g) the parts of the drill rig and the attachments of the drill rig that are permitted on the supporting surface;
- (h) the precautions to be taken to ensure that the drilling operation and movement of the drill rig on the path of travel,
 - (i) do not damage or affect the stability of any building, structure, property or public way adjacent to, or in the vicinity of, the drilling operation, and
 - (ii) do not endanger a person using any building, structure, property or public way adjacent to, or in the vicinity of, the drilling operation;
- (i) the frequency of inspections of the supporting surface and the path of travel of the drill rig, and the type of inspection required, to ensure they remain stable, do not deteriorate and continue to function as designed by the engineer, and any specific weather or other conditions that could affect the supporting surface or path of travel that would require additional inspections to be conducted; and
- (j) the qualifications of the person who conducts the inspections of the supporting surface and path of travel and whether the person needs to be an engineer, a person under the direction of an engineer, a competent worker or another person with specified qualifications. O. Reg. 345/15, s. 19.

(3) The supporting surface and path of travel for the drill rig shall be prepared or constructed in accordance with the engineer's written report. O. Reg. 345/15, s. 19.

(4) No deviation from the written report is permitted unless the deviation is approved, in advance and in a written report, by an engineer. O. Reg. 345/15, s. 19.

(5) The supporting surface and path of travel for the drill rig shall be inspected by an engineer after they are prepared or constructed and before the drill rig is assembled and erected on the supporting surface or

uses the path of travel to confirm that they were prepared or constructed in accordance with the engineer's report. O. Reg. 345/15, s. 19.

(6) The engineer shall prepare a written report of the results of the inspection under subsection (5). O. Reg. 345/15, s. 19.

(7) While a rotary foundation drill rig is in service at a drilling operation described in section 156.3, the employer responsible for the drilling operation shall ensure that,

- (a) the supporting surface and path of travel are regularly inspected in accordance with, and by the person identified by, the report described in subsection (2); and
- (b) a written report of the inspections and results are kept at the project and made available to an inspector upon request. O. Reg. 345/15, s. 19.

(8) The constructor and employer responsible for the drilling operation shall keep at the project a copy of all reports described in this section and make them available to an inspector upon request until the drilling operation is completed. O. Reg. 345/15, s. 19.

156.5 (1) Before a drilling operation described in section 156.3 begins, the employer responsible for it shall,

- (a) develop a drilling procedure for the drill rig in accordance with subsection (2) and have it approved by an engineer; and
- (b) have a copy of the drilling procedure provided to, and reviewed with, the workers engaged in the drilling operation. O. Reg. 345/15, s. 19.

(2) The drilling procedure shall be in writing and shall include, at a minimum, details of,

- (a) the sequence of activities of the drilling operation to be followed including, if applicable, the delivery of concrete, rebar, steel piles and other materials related to the drilling operation;
- (b) the procedures to be implemented for removing excavated soil and material from an auger or drilling tool and away from the supporting surface of the drill rig;
- (c) the location to be used for storing excavated soil and material so that it does not endanger workers;
- (d) the working area and designated path of travel to be used for any machinery or equipment used in the vicinity of the drilling operation so that the machinery or equipment does not affect the

stability and integrity of the supporting surface of the drill rig;

- (e) the measures and procedures to be implemented during the drilling operation to ensure that unremoved hazards do not endanger workers; and
- (f) the areas that have been designated at, or in the vicinity of, the drilling operation where,
 - (i) only persons authorized by the employer are allowed to enter, and
 - (ii) no persons or equipment are allowed to enter. O. Reg. 345/15, s. 19.

(3) While a rotary foundation drill rig is in service at a drilling operation described in section 156.3, the employer responsible for the drilling operation shall ensure that,

- (a) the drilling procedure described in subsection (2) is implemented; and
- (b) the drilling procedure is followed by the workers engaged in, and in the vicinity of, the drilling operation. O. Reg. 345/15, s. 19.

156.6 (1) An employer shall ensure that a worker who operates a rotary foundation drill rig,

- (a) is qualified in accordance with section 156.7;
- (b) has completed a training program that meets the requirements of section 156.9, or is participating in a training program that meets such requirements and is being instructed on the operation of the drill rig;
- (c) has demonstrated to the employer that the worker has adequate knowledge and proficiency in operating the drill rig to be used at the project; and
- (d) is authorized by the employer to operate the drill rig at the project. O. Reg. 345/15, s. 19.

(2) The employer shall maintain a record of the training program described in section 156.9 provided to the worker that includes,

- (a) the worker's name and the training dates; and
 - (b) the name and signature of the training provider. O. Reg. 345/15, s. 19.
- (3) The employer shall make the training record available to an

inspector upon request. O. Reg. 345/15, s. 19.

156.7 (1) No worker shall operate a rotary foundation drill rig except in accordance with this section. O. Reg. 345/15, s. 19.

(2) The worker shall,

- (a) have completed a training program that meets the requirements of section 156.9 and have written proof of training available at the project to an inspector upon request; or
- (b) be participating in a training program that meets the requirements of section 156.9 and is being instructed on the operation of the drill rig. O. Reg. 345/15, s. 19.

(3) If a worker is operating a drill rig with an effective torque equal to or greater than 50 kilonewton metres, the worker shall have a certificate of qualification or written proof of training as required by section 156.8 available at the project to an inspector upon request. O. Reg. 345/15, s. 19.

156.8 (1) No worker shall operate a rotary foundation drill rig with an effective torque greater than 270 kilonewton metres unless the worker,

- (a) holds a certificate of qualification issued under the Ontario College of Trades and Apprenticeship Act, 2009, that is not suspended, in the trade of hoisting engineer – mobile crane operator 1; or
- (b) is an apprentice who is working pursuant to a training agreement registered under the Ontario College of Trades and Apprenticeship Act, 2009, that is not suspended, in the trade of hoisting engineer – mobile crane operator 1. O. Reg. 345/15, s. 19.

(2) No worker shall operate a rotary foundation drill rig with an effective torque greater than 190 kilonewton metres but less than or equal to 270 kilonewton metres unless the worker,

- (a) holds a certificate of qualification issued under the Ontario College of Trades and Apprenticeship Act, 2009, that is not suspended, in the trade of hoisting engineer – mobile crane operator 1, or hoisting engineer – mobile crane operator 2; or
- (b) is an apprentice who is working pursuant to a training agreement registered under the Ontario College of Trades and Apprenticeship Act, 2009, that is not suspended, in the trade of hoisting engineer – mobile crane operator 1, or hoisting engineer – mobile crane operator 2. O. Reg. 345/15, s. 19.

(3) No worker shall operate a rotary foundation drill rig with an effective torque equal to or greater than 50 kilonewton metres but less than or

equal to 190 kilonewton metres unless the worker,

- (a) holds a certificate of qualification issued under the Ontario College of Trades and Apprenticeship Act, 2009, that is not suspended, in the trade of hoisting engineer – mobile crane operator 1, or hoisting engineer – mobile crane operator 2;
- (b) is an apprentice who is working pursuant to a training agreement registered under the Ontario College of Trades and Apprenticeship Act, 2009, that is not suspended, in the trade of hoisting engineer – mobile crane operator 1, or hoisting engineer – mobile operator 2; or
- (c) has written proof that the worker has completed a training program on the operation of a 0-8 ton mobile crane that included instruction on,
 - (i) the relevant requirements of this Regulation,
 - (ii) how to use the manufacturer's operating manuals,
 - (iii) minimum distances when approaching an overhead electrical conductor,
 - (iv) communications and signals,
 - (v) types of mobile cranes and their components, including wire and synthetic rope, hydraulics, rigging and rigging hardware,
 - (vi) pre-operational inspections and checks, and
 - (vii) safe work practices related to mobile cranes, including crane set-up, load charts, assembly and disassembly of manual boom extensions, basic crane operation and maintenance. O. Reg. 345/15, s. 19.

156.9 A training program for the operation of a rotary foundation drill rig shall include instruction on,

- (a) the relevant requirements of this Regulation and the drill rig manufacturer's operating manual;
- (b) safe work practices;
- (c) communications and signals;
- (d) pre-operational inspections and checks;
- (e) site assessment;
- (f) drill rig set-up, securing and operation; and
- (g) equipment maintenance. O. Reg. 345/15, s. 19.

TOWER CRANES

157. (1) A tower crane, other than a tower crane mounted on a travelling base using a travelling undercarriage or a self-erecting tower crane that does not require foundations, shall be erected at a project in accordance with this section. O. Reg. 241/23, s. 12.

(2) The foundation, shoring and bracing that support a tower crane or tie it in place shall be,

- (a) designed by an engineer in accordance with the crane manufacturer's specifications, if any; and
- (b) constructed, installed and dismantled in accordance with the design drawings, subject to any deviations approved in writing by an engineer. O. Reg. 241/23, s. 12.

(3) The engineer who prepares the foundation design drawings shall consider the tower crane ground bearing pressure in preparing the drawings. O. Reg. 241/23, s. 12.

(4) Where a building or structure is supporting the tower crane, the engineer responsible for the structural integrity of the building or structure shall review the design drawings for the foundation, shoring and bracing for the tower crane before the crane is erected on a project to ensure the structural integrity of the building or structure. O. Reg. 241/23, s. 12.

(5) An engineer shall sign the design drawings for the foundation, shoring and bracing for a tower crane upon approving them. O. Reg. 241/23, s. 12.

(6) The constructor shall keep at the project a copy of the signed design drawings for the foundation, shoring and bracing for a tower crane and any written opinion about the drawings by an engineer. O. Reg. 241/23, s. 12.

(7) An engineer shall,

- (a) inspect the foundation supporting a tower crane before the concrete is poured and prepare a written report; and
- (b) confirm that the foundation or support surface complies with the foundation design drawings, subject to any deviations from the design drawings approved in writing by an engineer. O. Reg. 241/23, s. 12.

(8) The written report required under clause (7) (a) shall be kept at the project while the tower crane is on the project. O. Reg. 241/23, s. 12.

(9) A tower crane may not be erected until the concrete foundation

reaches the strength specified in the design drawings for the foundation. O. Reg. 241/23, s. 12.

(10) The shoring and bracing that support a tower crane or tie it in place must be inspected by an engineer after the shoring and bracing or the tie-ins have been installed and before the crane is put into service for the first time at a project. O. Reg. 241/23, s. 12.

(11) An engineer shall prepare a written report of the inspection required under subsection (10), which shall include confirmation of whether the shoring, bracing and tie-ins have been installed in accordance with the design drawings, subject to any deviations approved in writing by an engineer and, where a building or structure is supporting the tower crane, whether the building or structure has reached sufficient strength to resist the crane reactions. O. Reg. 241/23, s. 12.

(12) The written report prepared shall indicate any circumstances that would require additional inspections of the shoring, bracing and tie-ins by an engineer after the initial inspection required under subsection (10). O. Reg. 241/23, s. 12.

(13) After the initial inspection required under subsection (10), the shoring and bracing components and tie-ins installed for the climbing operation shall be inspected by a competent worker,

- (a) unless otherwise specified by the engineer in the written report required under subsection (11), before and after each climbing operation of the crane, to ensure the shoring and bracing components and tie-ins have been installed in accordance with the foundation design drawings; and
- (b) weekly after each climbing operation to ensure all the installed shoring and bracing components and tie-ins are in place. O. Reg. 241/23, s. 12.

(14) Each major component used for shoring the tower crane shall be marked by a conspicuous label stating that the component shall not be removed or repositioned unless authorized by an engineer. O. Reg. 241/23, s. 12.

157.1 (1) A tower crane shall be,

- (a) erected plumb to a tolerance of 1:500 unless otherwise specified by the manufacturer; and
- (b) plumbed while balanced and then held in the plumbed condition by wedges or other means, initially when it is set up and again after each climb. O. Reg. 241/23, s. 12.

157.2 (1) A tower crane shall be erected, dismantled and climbed in accordance with the following clauses of CSA Standard Z248-17:

1. Clause 5.1, Crane erection crew.
2. Clause 5.8, Erection, climbing, and dismantling equipment.
3. Clause 5.9, General erection, climbing, and dismantling procedure. O.Reg. 241/23, s. 13.

157.3 (1) Each component of a tower crane manufactured on or after January 1, 2025, must be designed to meet the standards set out in the Table to this section. O. Reg. 241/23, s. 13.

(2) If a tower crane manufactured before January 1, 2025 does not meet the standards set out in the Table to this section, or equivalent standards as determined by an engineer, the crane shall not be used until an engineer verifies that the crane has been modified to meet those standards. O. Reg. 241/23, s. 13.

TABLE

Item	Column 1 Component	Column 2 Minimum design standards
1.	Crane Design	Clauses 4.1 to 4.25 of CSA Standard Z248-17, or European Standard EN 14439:2006+A2:2009
2.	Electrical	Electrical Safety Authority SPEC-009 R0, Electrical Safety for Tower Cranes
3.	Control Systems	Clause 4.21 of CSA Standard Z248-17

O. Reg. 241/23, Table.

158. (1) An engineer shall ensure that a tower crane's structural elements, its electrical, mechanical and hydraulic components, and its control systems, are inspected in accordance with the performance standards for inspecting a tower crane as prescribed by Ontario Regulation 260/08 (Performance Standards) made under the Professional Engineers Act, and that any defects are identified, at the following times:

1. For a tower crane other than a self-erecting tower crane,
 - i. before the crane is erected at a project,
 - ii. after the crane is erected and before it is used, and
 - iii. thereafter at intervals not greater than 12 months or

as often as is recommended by the crane manufacturer, whichever is more frequent, while the tower crane is erected at a project.

2. For a self-erecting tower crane,

- i. before the crane is put into service for the first time, and
- ii. thereafter at intervals not greater than 12 months while the crane is in use at a project, after every 12 erections of the crane or as often as is recommended by the crane manufacturer, whichever occurs first. O. Reg. 241/23, s. 14.

(2) The inspection of structural components must include non-destructive testing to ensure the structural integrity of the crane. O. Reg. 241/23, s. 14.

(3) The engineer conducting the inspection or under whose direction an inspection is done shall prepare a written report of the inspection and test results in accordance with the performance standards for inspecting a tower crane as prescribed by Ontario Regulation 260/08, including confirmation that all components are in adequate condition. O. Reg. 241/23, s. 14.

(4) A tower crane shall not be used until,

- (a) any defects identified in the inspection have been corrected or repaired in accordance with the instructions of the tower crane manufacturer or an engineer; and
- (b) the tower crane has been inspected by an engineer and the engineer has prepared a written report of the corrections, repairs and results of the inspection confirming that any defects identified have been corrected or repaired and that the corrected or repaired components are in adequate condition. O. Reg. 241/23, s. 14.

159. (1) An engineer shall ensure that the climbing system for a tower crane is inspected in accordance with the performance standards for inspecting a tower crane as prescribed by Ontario Regulation 260/08 (Performance Standards) made under the Professional Engineers Act,

- (a) prior to the initial climbing operation of the tower crane at the project; and
- (b) thereafter at intervals not greater than 12 months while the tower crane is erected at a project. O. Reg. 241/23, s. 14.

(2) The engineer conducting the inspection or under whose direction an inspection is done shall prepare a written report of the inspection in accordance with the performance standards for inspecting a tower crane

as prescribed by Ontario Regulation 260/08, including confirmation that all components are in adequate condition. O. Reg. 241/23, s. 14.

159.1 (1) An engineer shall ensure that a tower crane's structural elements, its electrical, mechanical and hydraulic components and its control systems that may affect the structural integrity, stability or motion of a tower crane or its load are inspected in accordance with subsection (2),

(a) before the tower crane is erected at a project, if 10 years have elapsed since the time the tower crane was manufactured; and

(b) thereafter at least once every 10 years after the date of the last inspection under this section before the tower crane is erected at a project. O. Reg. 241/23, s. 15.

(2) The inspection required in subsection (1) shall include the following:

1. Inspection of structural components including,

i. visual inspection of all welds and non-destructive testing of a sampling of welds determined by an engineer, and

ii. measurements of the consistency of wall thickness within the closed section of the structural components to confirm the sections are compliant with the original design requirements.

2. Inspection of the rotating shafts, gears, hook blocks and mechanical linkages for signs of cracks, damage or wear using non-destructive testing.

3. For hydraulic components,

i. measurement of the pressure at which pressure relief valves actuate, and

ii. testing of hydraulic holding valves used to stop movement in the case of pressure loss.

4. Measurements to confirm that components that routinely wear due to use including clutch plates, brake pads, sheaves, wire ropes, bushings and pins, are within tolerances specified by their manufacturers.

5. Inspection of non-structural components that may be subject to cracking, damage or wear.

6. Performance of operational tests on the components listed below in accordance with the manufacturer's instructions to confirm that the components are in adequate condition and operating in accordance with the manufacturer's specifications:

i. Brakes.

- ii. Slew ring.
- iii. Hydraulic motors.
- iv. Hydraulic pumps.
- v. Valve blocks.
- vi. Hoist and luff drums.
- vii. Gearboxes and drive shafts. O. Reg. 241/23, s. 15.

(3) The operational tests required under paragraph 6 of subsection (2) do not require the components to be dismantled. O. Reg. 241/23, s. 15.

(4) The engineer conducting the inspection or under whose direction an inspection is done shall prepare a written report of the inspection including test results, observations, measurements and records. O. Reg. 241/23, s. 15.

(5) Any defects identified in the inspection that may affect the structural integrity, non-structural components, stability or motion of the tower crane or its load shall be corrected or repaired in accordance with the instructions of the tower crane or component manufacturer or an engineer. O. Reg. 241/23, s. 15.

(6) An engineer shall confirm in a written report that any defects identified have been corrected or repaired and that the corrected or repaired components are in adequate condition. O. Reg. 241/23, s. 15.

160. A tower crane shall have,

- (a) limiting devices to, as applicable,
 - (i) limit trolley travel at both ends of the boom,
 - (ii) stop boom luffing at the lower or upper limits of boom movement,
 - (iii) stop load block upward motion before two-blocking occurs,
 - (iv) limit crane travel at both ends of the runway tracks,
 - (v) limit maximum load lifted in each gear ratio,
 - (vi) prevent overloading the crane by limiting the lifted load in accordance with the operating radius,
 - (vii) limit the maximum load lifted to the allowable line pull, and,
 - (viii) limit pressures in hydraulic or pneumatic circuits;

(b) load and radius indicating devices; and

(c) such other switches and devices as the manufacturer specifies.
O. Reg. 241/23, s. 16.

161. (1) A competent worker shall perform operational tests on a tower crane to ensure that,

(a) its limiting and indicating devices are installed and functioning in accordance with the manufacturer's specifications or an engineer's instructions;

(b) all clearances and alignments are adequate;

(c) gearing and all other moving parts are operating correctly;

(d) controller switches and other control devices are operating correctly;

(e) all limit switches are operating correctly;

(f) all circuits, interlocks, and sequences of operation are operating in accordance with the manufacturer's specifications;

(g) all protective devices are operating correctly;

(h) the audio device near the base of travelling cranes is operating correctly; and

(i) each motion of the crane operates in accordance with the manufacturer's specifications. O. Reg. 241/23, s. 17.

(1.1) After the erection of a tower crane but before the tower crane is put into service, load tests shall be performed on the tower crane in accordance with clause 6.3.3 of CSA Standard Z248-17. O. Reg. 241/23, s. 17.

(2) Operational tests shall be done,

(a) after the tower crane is erected on the project and before it is used; and

(b) at one-week intervals after the test under clause (a) while the crane is erected on the project. O. Reg. 213/91, s. 161 (2).

(3) Overload limit devices for a tower crane shall be tested using test blocks designed for the purpose that have their weight clearly marked on them. O. Reg. 213/91, s. 161 (3).

(4) The test blocks shall be kept on the project while the crane is erected. O. Reg. 213/91, s. 161 (4).

161.1 While a tower crane is in use at a project its components shall be inspected by a competent worker in accordance with the manufacturer's instructions, but at a minimum the following inspections shall be done:

1. Every day, a competent worker shall,

- i. inspect all structural pins and keepers,
- ii. ensure all wedges in slab openings are in place and are tight,
- iii. ensure all guy lines and all guy line connections, if used, are adequate,
- iv. inspect mast bolts and anchor bolts,
- v. ensure all limit devices (except the line pull limit switch), signal lights, audio and visual indicators and brakes are operating correctly,
- vi. visually inspect all wire rope cable that winds on a drum or passes over a sheave that may reasonably be expected to be in use during the day's operation of the tower crane for damage or possible evidence of rope failure,
- vii. inspect grounding connections,
- viii. inspect the tracks for loose connections, proper drainage, subsidence and bogie wear on travelling cranes,
- ix. inspect rail clamps, if used, daily or each time their application is made, and
- x. inspect the turn table bolts.

2. Every week, a competent worker shall inspect,

- i. all trolley rollers, tracks, slewing rings and rollers,
- ii. all gear shafts and belt drives,
- iii. all sheaves, bushings and pins,
- iv. all guy ropes, pendant lines, cable clips, thimbles and ferrules,
- v. all jib backstops and boom stops,
- vi. all rope attachments,
- vii. all walkways, handrails and ladders,
- viii. the locations in the structure where accumulation of

water could result in damage, to ensure that such water is drained,

ix. any tie-ins to slabs or other bracing systems that are used, and

x. any other components recommended by the manufacturer.

3. Every month, a competent worker shall inspect,

i. all running ropes, in accordance with clause 6.5.1.3. of CSA Standard Z248-17 for all types of deterioration,

ii. all mast and boom structures for cracks or buckling,

iii. travelling cranes for bogie wear,

iv. counterweight supports,

v. brake adjustments for wear,

vi. drums, sheaves, bearings, and mounts, and

vii. any other components recommended by the manufacturer.

O. Reg. 241/23, s. 18.

162. (1) A tower crane boom shall be able to slew freely when the crane is unattended except when,

(a) the boom may collide with another crane, a structure or another object; or

(b) to slew freely would be contrary to the written procedures of the crane's manufacturer. O. Reg. 213/91, s. 162 (1).

2) When a tower crane boom is not permitted to slew freely because of the circumstances in clauses (1) (a) or (1) (b), it shall be secured in accordance with the written procedures of the crane's manufacturer or written procedures prepared by an engineer. O. Reg. 241/23, s. 19.

(3) Unattended or out of service cranes shall be secured in accordance with clauses 8.7.1 to 8.7.5 of CSA Standard Z248-17. O. Reg. 241/23, s. 19.

162.1 When there are multiple cranes at a project, hoisting operations shall meet the clearance requirements set out in clause 8.10 of CSA Standard Z248-17. O. Reg. 241/23, s. 20.

163. (1) Subject to subsection (2), the operator's cabin of a tower crane shall be located on and attached to or positioned on the crane in accordance with the instructions of the crane's manufacturer for the specific model and configuration of the crane and in such a manner that in the event of a failure of the boom, the cabin will not be crushed against

the mast. O. Reg. 213/91, s. 163 (1).

(2) The operator's cabin shall not be located on or attached to the boom unless,

- (a) the cabin and its attachments have been specifically designed and fabricated for that purpose by the original manufacturer of the crane in accordance with good engineering practice;
- (b) the boom of the crane cannot affect or be affected by the operation of another crane or make contact with a structure or equipment;
- (c) the crane is not overlapped by any part of another crane;
- (d) because of specific site conditions, the location of the cabin on the boom provides greater visibility for the operator than does the manufacturer's standard cabin location;
- (e) the means of access to the cabin or other locations on the boom is by a catwalk constructed of skid resistant expanded metal or similar material and fitted with solidly constructed guardrails and devices which provide fall protection for the operator;
- (f) the structural, environmental and ergonomic design of the cabin is equal to or greater than that of the crane's manufacturer's standard cabin design; and
- (g) the proposed location and attachment method provide a structural and mechanical safety factor equal to or greater than that of a cabin located on the crane mast or attached to the slewing ring. O. Reg. 213/91, s. 163 (2).

(3) If the crane manufacturer specifies the location of the operator's cabin to be on the boom of a tower crane, the crane manufacturer shall provide to the owner of the crane a report for the specific model and specific configuration of crane on a project. O. Reg. 213/91, s. 163 (3).

- (4) The crane manufacturer's report shall include,
 - (a) the crane load restrictions, reductions or modifications resulting from the effect of the cabin weight and its offset from the boom centreline;
 - (b) the crane configuration and operating restrictions resulting from the effect of the cabin location and attachment method; and
 - (c) engineering design drawings that include,
 - (i) the structural and ergonomic design of the cabin,
 - (ii) the location of the cabin on the boom,

- (iii) the attachment method including all fittings and hardware, and
- (iv) all means of access. O. Reg. 213/91, s. 163 (4).

164. Unless otherwise specified by the manufacturer or approved by an engineer that a weight needs to be secured to a load block of an unattended tower crane to balance a crane that cannot slew freely, a load block of an unattended tower crane shall be left empty, at the top position and located at the minimum radius specified by the manufacturer or approved by an engineer. O. Reg. 241/23, s. 21.

165. (1) The track foundation and track, including rails and ties, of a tower crane mounted on a travelling base using a travelling undercarriage shall be capable of carrying all loads to which it is likely to be subjected without deformation or settlement that affects the stability of the crane. O. Reg. 241/23, s. 21.

(2) Design drawings for the track foundation and track, including rails and ties, shall be prepared by an engineer in accordance with the crane manufacturer's specifications. O. Reg. 241/23, s. 21.

(3) The track foundation and track, including rails and ties, shall be inspected by an engineer in accordance with the performance standards for inspecting a tower crane as prescribed by Ontario Regulation 260/08 (Performance Standards) made under the Professional Engineers Act before a crane is placed on the track to confirm that the track foundation and track have been installed in accordance with the design drawings. O. Reg. 241/23, s. 21.

(4) The undercarriage of a tower crane mounted on a travelling base shall be fitted with rail clamps that can be firmly attached to the rails to lock the crane in position. O. Reg. 241/23, s. 21.

(5) A tower crane mounted on a travelling base using a travelling undercarriage shall be locked in position on the rails when not in use. O. Reg. 241/23, s. 21.

(6) A tower crane mounted on a travelling base using a travelling undercarriage shall have rail stops or bumpers that extend at least as high as the centre of the undercarriage wheels and that are securely attached to the rail at both ends. O. Reg. 241/23, s. 21.

DERRICKS, STIFF-LEG DERRICKS AND SIMILAR HOISTING DEVICES

166. (1) No derrick, stiff-leg derrick or similar hoisting device shall be attached to a building or structure unless this section is complied with. O. Reg. 213/91, s. 166 (1).

(2) An engineer shall prepare design drawings and specifications for the attachment of a derrick, stiff-leg derrick or similar hoisting device to a building or structure. O. Reg. 213/91, s. 166 (2).

(3) The design drawings and specifications shall include,

- (a) the location of the derrick, stiff-leg derrick or similar hoisting device on the building or structure;
- (b) the location of anchor bolts, guy wires, supports and shoring for it;
- (c) particulars of the weight of the loads and the radius at which the loads are to be lifted; and
- (d) particulars of the loads and forces on the building or structure imposed by the derrick, stiff-leg derrick or similar hoisting device. O. Reg. 213/91, s. 166 (3).

(4) The constructor shall ensure that the structural engineer responsible for the structural integrity of a building or structure reviews and approves in writing the design drawings and specifications for a derrick, stiff-leg derrick or similar hoisting device before it is installed. O. Reg. 213/91, s. 166 (4).

(5) An engineer shall inspect a derrick, stiff-leg derrick or similar hoisting device before it is first used on a building or structure to ensure that it is installed in accordance with the design drawings and specifications. O. Reg. 213/91, s. 166 (5).

(6) The engineer conducting the inspection shall prepare a written report of the inspection. O. Reg. 213/91, s. 166 (6); O. Reg. 85/04, s. 19.

(7) The constructor shall keep a copy of the design drawings and specifications for a derrick, stiff-leg derrick or similar hoisting device and the report prepared under subsection (6) at a project while the derrick, stiff-leg derrick or similar hoisting device is on the project. O. Reg. 213/91, s. 166 (7).

167. (1) The pilot of a helicopter that is hoisting materials shall be competent to fly an externally-loaded helicopter. O. Reg. 213/91, s. 167 (1).

(2) The pilot shall be in charge of the hoisting operation and shall determine the size and weight of loads to be hoisted and the method by which they are attached to the helicopter. O. Reg. 213/91, s. 167 (2).

(3) Ground personnel including signallers for a helicopter being used to hoist materials shall be competent workers. O. Reg. 213/91, s. 167 (3).

(4) The constructor shall take precautions against hazards caused by helicopter rotor downwash. O. Reg. 213/91, s. 167 (4).

CABLES, SLINGS, RIGGING

168. (1) A cable used by a crane or other hoisting device shall be wire rope or synthetic rope of the type, size, grade and construction recommended by the manufacturer of the crane or other hoisting device. O. Reg. 241/23, s. 22.

- (2) All wire rope used on a crane or other hoisting device shall,
- (a) be compatible with the sheaves and the drum of the crane or other hoisting device;
 - (b) be lubricated to prevent corrosion and wear;
 - (c) not be spliced;
 - (d) have its end connections securely fastened; and
 - (e) be kept with at least three full turns on the drum. O. Reg. 241/23, s. 22.

(3) The following information shall be included in the operator's crane log in respect of any wire ropes installed on a tower crane:

1. The diameter of the rope.
2. The length of the rope.
3. The tensile strength of single wires and finish.
4. The wire rope construction, type of lay and direction of lay.
5. The number of outer strands of the rope.
6. The type of core of the rope.
7. The nominal or minimum rated breaking strength of the rope.
8. The recommended maximum working load limit of the rope.
9. The type of end fitting or connection and proof-test results if applicable of the rope.
10. Whether the use of a swivel is permitted.
11. The name of the manufacturer or supplier of the rope.
12. The name of the person or organization issuing the wire rope written record and the date it was issued. O. Reg. 241/23, s. 22.

- (4) No cable used by a crane or other hoisting device,
- (a) subject to subsection (6), shall contain six randomly-distributed wires that are broken in one rope lay or three or more wires that

are broken in one strand in a rope lay;

(b) shall be smaller than its nominal rope diameter by more than,

(i) one millimetre for a diameter up to and including nineteen millimetres,

(ii) two millimetres for a diameter greater than nineteen millimetres up to and including twenty-nine millimetres, and

(iii) three millimetres for a diameter greater than twenty-nine millimetres;

(c) shall be worn by more than one-third of the original diameter of its outside individual wires;

(d) shall show evidence of waviness, strand extrusion, wire extrusion, kinks, tightened loops, crushing, bird-caging, bends or other damage resulting in distortion of the rope structure;

(e) shall have had any contact with electricity;

(f) shall show evidence of heat damage; or

(g) shall show evidence of corrosion in excess of the rope manufacturer's instructions. O. Reg. 241/23, s. 22.

(5) If any damage to a cable is identified, the cable shall be evaluated by a competent person to determine whether it meets the requirements of subsection (4), and be taken out of service if the evaluation determines that the cable does not meet the requirements. O. Reg. 241/23, s. 22.

(6) No cable that is static or is used for pendants,

(a) shall contain three or more broken wires in one lay or in a section between end connectors; or

(b) shall have more than one broken wire at an end connector. O. Reg. 241/23, s. 22.

(7) Rotation-resistant wire rope shall not be used for a cable for boom hoist reeving unless specified by the crane manufacturer or as pendants. O. Reg. 241/23, s. 22.

(8) Rotation-resistant wire rope shall not be used where an inner wire or strand for a cable is damaged or broken. O. Reg. 241/23, s. 22.

168.1 Swivels shall not be used on a boom hoist cable on a tower crane unless,

(a) they are explicitly permitted by the tower crane manufacturer and wire rope manufacturer; or

(b) an engineer evaluated the tower crane and the wire rope and determined that a swivel may be used. O. Reg. 241/23, s. 22.

169. A cable used by a crane or other hoisting device shall be capable of supporting at least,

- (a) three and one-half times the maximum load to which it is likely to be subjected if it is used on a device other than a tower crane and it winds on a drum or passes over a sheave;
- (b) five times the maximum load to which it is likely to be subjected if it is used on a tower crane and it winds on a drum or passes over a sheave;
- (c) three times the maximum load to which it is likely to be subjected if it is a pendant or is not subject to winding or bending; and
- (d) ten times the maximum load to which it is likely to be subjected if the crane or other hoisting device is used for supporting persons. O. Reg. 213/91, s. 169.

170. (1) All cables used by a crane or other hoisting device shall be visually inspected by a competent worker at least once a week when the crane or other hoisting device is being used, or more frequently, if recommended by the cable manufacturer. O. Reg. 241/23, s. 24.

(2) The worker performing an inspection shall record the condition of the cable inspected and a record of the inspection shall be kept at the project while the crane or other hoisting device is in use at the project. O. Reg. 241/23, s. 24.

(3) If an inspection under subsection (1) is of a cable used by a crane or similar hoisting device, the record of inspection shall be made in the operator's crane log. O. Reg. 241/23, s. 24.

171. (1) A cable used by a crane or other hoisting device shall be adequately attached,

- (a) by binding and fastening the cable around an oval thimble in a way that is strong enough to prevent the cable thimble from separating;
- (b) by fastening the cable within a tapered socket by means of virgin zinc or epoxy resin; or
- (c) by fastening the cable with a wedge-type socket fitted with a wire rope clip at the dead end to prevent the accidental release or loosening of the wedge. O. Reg. 241/23, s. 24.

(2) The dead end cable of a wedge socket assembly on a hoisting line

shall extend between 100 millimetres and 300 millimetres out of the socket. O. Reg. 241/23, s. 24.

(3) All wire rope terminations used on a tower crane shall be proof tested after installation onto the wire rope in accordance with the recommendations of the wire rope or termination manufacturer, but in no case to more than 50 per cent of the wire rope's nominal or minimum rated breaking strength, and permanent records of the proof testing shall be kept for the life of the terminations. O. Reg. 241/23, s. 24.

(4) Despite subsection (3), wire rope terminations installed onto the wire rope used on a tower crane that is in service on the date section 24 of Ontario Regulation 241/23 comes into force shall be proof tested before the wire rope is put into subsequent service. O. Reg. 241/23, s. 24.

172. (1) A container, sling or similar device for rigging or hoisting an object, including its fittings and attachments,

- (a) shall be suitable for its intended use;
- (b) shall be suitable for and capable of supporting the object being rigged or hoisted;
- (c) shall be so arranged as to prevent the object or any part of the object from slipping or falling;
- (d) shall be capable of supporting at least five times the maximum load to which it may be subjected; and
- (e) shall be capable of supporting at least ten times the load to which it may be subjected if it is to be used to support a person. O. Reg. 213/91, s. 172 (1).

(2) A sling or similar device made of web-type fabric or nylon shall be labelled to indicate its load rating capacity. O. Reg. 213/91, s. 172 (2).

(3) No sling or similar device for rigging or hoisting made of web-type fabric or nylon shall be used if it may be cut. O. Reg. 213/91, s. 172 (3).

173. (1) Every hoisting hook shall be equipped with a safety catch. O. Reg. 213/91, s. 173 (1).

(2) No safety catch is required on a hoisting hook used in placing structural members if the method of placing protects workers to the same standard as a safety catch does. O. Reg. 213/91, s. 173 (2).

(3) A hoisting hook shall have its load rating legibly cast or stamped on it in a location where the person using the hook can readily see it. O. Reg. 213/91, s. 173 (3).

(4) A hoisting hook shall not be used if it is cracked, has a throat opening

that is greater than as manufactured or is twisted from the plane of the unbent hook. O. Reg. 213/91, s. 173 (4).

174. A hook block shall have its load rating and weight legibly cast or stamped on it in a conspicuous location. O. Reg. 213/91, s. 174.

175. (1) An overhauling weight used on the cable of a crane or other hoisting device,

- (a) shall be prevented from sliding up or down the cable; and
- (b) shall be securely attached to the load hook and the cable. O. Reg. 213/91, s. 175 (1).

(2) No overhauling weight used on the cable of a crane or similar hoisting device shall be split. O. Reg. 213/91, s. 175 (2).

176. (1) Only an alloy steel chain or a chain manufactured for the purpose shall be used for hoisting. O. Reg. 213/91, s. 176.

(2) No alloy steel chain shall be annealed or welded. O. Reg. 345/15, s. 20.

(3) A chain used for hoisting shall,

- (a) be labelled to indicate its load rating capacity;
- (b) be repaired and reconditioned in accordance with the specifications of its manufacturer;
- (c) after being repaired or reconditioned, be proof tested in accordance with the specifications of its manufacturer; and
- (d) be visually inspected by a competent worker as frequently as recommended by its manufacturer and, in any case, at least once a week when the chain is in service. O. Reg. 345/15, s. 20.

177. REVOKED: O. Reg. 345/15, s. 21.

178. A friction-type clamp used in hoisting materials shall be constructed so that an accidental slackening of the hoisting cable does not release the clamp. O. Reg. 213/91, s. 178.

179. (1) If a worker may be endangered by the rotation or uncontrolled motion of a load being hoisted by a crane or other hoisting device, one or more guide ropes or tag lines shall be used to prevent the rotation or uncontrolled motion. O. Reg. 213/91, s. 179 (1).

(2) No guide rope or tag line shall be removed from a load referred to in subsection (1) until the load is landed and there is no danger of it tipping, collapsing or rolling. O. Reg. 213/91, s. 179 (2).

180. (1) Piles and sheet-piling shall be adequately supported to prevent their uncontrolled movement while they are being hoisted, placed, removed or withdrawn. O. Reg. 213/91, s. 180 (1).

(2) No worker shall be in an area where piles or sheet-piling are being hoisted, placed, removed or withdrawn unless the worker is directly engaged in the operation. O. Reg. 213/91, s. 180 (2).

ELECTRICAL HAZARDS

181. (1) Except where otherwise required by this Regulation, electrical work performed on or near electrical transmission or distribution systems shall be performed in accordance with the document entitled "Electrical Utility Safety Rules" published by the Infrastructure Health and Safety Association and revised 2019. O. Reg. 627/05, s. 4; O. Reg. 443/09, s. 5; O. Reg. 345/15, s. 22; O. Reg. 327/19, s. 2.

(2) Sections 182, 187, 188, 189, 190, 191 and 193 do not apply to electrical work that is performed on or near electrical transmission or distribution systems if the work is performed in accordance with the document referred to in subsection (1). O. Reg. 627/05, s. 4.

182. (1) No worker shall connect, maintain or modify electrical equipment or installations unless,

- (a) the worker holds a certificate of qualification issued under the Ontario College of Trades and Apprenticeship Act, 2009, that is not suspended, in the trade of,
 - (i) electrician — construction and maintenance, or
 - (ii) electrician — domestic and rural, if the worker is performing work that is limited to the scope of practice for that trade; or
- (b) the worker is otherwise permitted to connect, maintain or modify electrical equipment or installations under the Ontario College of Trades and Apprenticeship Act, 2009 or the Technical Standards and Safety Act, 2000. O. Reg. 627/05, s. 4; O. Reg. 88/13, s. 2.

(2) A worker who does not meet the requirements of clause (1) (a) or (b) may insert an attachment plug cap on the cord of electrical equipment or an electrical tool into, or remove it from, a convenience receptacle. O. Reg. 627/05, s. 4.

183. Every reasonable precaution shall be taken to prevent hazards to workers from energized electrical equipment, installations and conductors. O. Reg. 627/05, s. 6.

184. (1) No person, other than a person authorized to do so by the

supervisor in charge of the project, shall enter or be permitted to enter a room or other enclosure containing exposed energized electrical parts. O. Reg. 627/05, s. 7.

(2) The entrance to a room or other enclosure containing exposed energized electrical parts shall be marked by conspicuous warning signs stating that entry by unauthorized persons is prohibited. O. Reg. 627/05, s. 7.

185. (1) Electrical equipment, installations, conductors and insulating materials shall be suitable for their intended use and shall be installed, maintained, modified and operated so as not to pose a hazard to a worker. O. Reg. 627/05, s. 7.

(2) For greater certainty, the regulations made under section 113 of the Electricity Act, 1998 apply to electrical equipment, installations, conductors and insulating materials and to temporary wiring installations on projects. O. Reg. 627/05, s. 7.

186. Electrical equipment, installations and conductors that are not to be used for the purpose for which they were designed shall be,

- (a) removed; or
- (b) left in an electrically non-hazardous condition by being disconnected, de-energized, tagged and,
 - (i) grounded, in the case of power lines,
 - (ii) locked out, in the case of electrical equipment. O. Reg. 627/05, s. 7.

187. Tools, ladders, scaffolding and other equipment or materials capable of conducting electricity shall not be stored or used so close to energized electrical equipment, installations or conductors that they can make electrical contact. O. Reg. 627/05, s. 7.

188. (1) This section applies unless the conditions set out in clauses 189 (a) and (b) are satisfied. O. Reg. 627/05, s. 7.

(2) No object shall be brought closer to an energized overhead electrical conductor with a nominal phase-to-phase voltage rating set out in Column 1 of the Table to this subsection than the distance specified opposite to it in Column 2.

TABLE

Item	Column 1 Nominal phase-to-phase voltage rating	Column 2 Minimum distance
1.	750 or more volts, but no more than 150,000 volts	3 m
2.	more than 150,000 volts, but no more than 250,000 volts	4.5 m
3.	more than 250,000 volts	6 m

O. Reg. 627/05, s. 7; O. Reg. 345/15, s. 23.

(3) Subsections (4) to (9) apply if a crane, similar hoisting device, backhoe, power shovel or other vehicle or equipment is operated near an energized overhead electrical conductor and it is possible for a part of the vehicle or equipment or its load to encroach on the minimum distance permitted under subsection (2). O. Reg. 627/05, s. 7.

(4) A constructor shall,

(a) establish and implement written measures and procedures adequate to ensure that no part of a vehicle or equipment or its load encroaches on the minimum distance permitted by subsection (2); and

(b) make a copy of the written measures and procedures available to every employer on the project. O. Reg. 627/05, s. 7.

(5) The written measures and procedures shall include taking the following precautions to protect workers:

1. Adequate warning devices, visible to the operator and warning of the electrical hazard, shall be positioned in the vicinity of the hazard.

2. The operator shall be provided with written notification of the electrical hazard before beginning the work.

3. A legible sign, visible to the operator and warning of the potential electrical hazard, shall be posted at the operator's station. O. Reg. 627/05, s. 7.

(6) Before a worker begins work that includes an activity described in subsection (3), the employer shall provide a copy of the written measures and procedures to the worker and explain them to him or her. O. Reg. 627/05, s. 7.

(7) The worker shall follow the written measures and procedures. O. Reg. 627/05, s. 7.

(8) A competent worker, designated as a signaller, shall be stationed so that he or she is in full view of the operator and has a clear view of the electrical conductor and of the vehicle or equipment, and shall warn the operator each time any part of the vehicle or equipment or its load may approach the minimum distance. O. Reg. 627/05, s. 7.

(9) Section 106 also applies with respect to the signaller designated under subsection (8). O. Reg. 627/05, s. 7.

189. Section 188 does not apply if,

(a) under the authority of the owner of the electrical conductor,

protective devices and equipment are installed, and written measures and procedures are established and implemented, that are adequate to protect workers from electrical shock and burn; and

- (b) the workers involved in the work use protective devices and equipment, including personal protective equipment, and follow written measures and procedures that are adequate to protect workers from electrical shock and burn. O. Reg. 627/05, s. 7.

190. (1) This section applies if work is to be done on or near energized exposed parts of electrical equipment or of an electrical installation or conductor. O. Reg. 627/05, s. 7.

- (2) An employer shall,

- (a) establish and implement written measures and procedures for complying with this section to ensure that workers are adequately protected from electrical shock and burn; and
- (b) make a copy of the written measures and procedures available to every worker on the project. O. Reg. 627/05, s. 7.

(3) The worker shall follow the written measures and procedures. O. Reg. 627/05, s. 7.

(4) Subject to subsection (9), the power supply to the electrical equipment, installation or conductor shall be disconnected, locked out of service and tagged in accordance with subsection (6) before the work begins, and kept disconnected, locked out of service and tagged while the work continues. O. Reg. 627/05, s. 7.

(5) Hazardous stored electrical energy shall be adequately discharged or contained before the work begins and shall be kept discharged or contained while the work continues. O. Reg. 627/05, s. 7.

(6) The following rules apply to the tagging of the power supply under subsection (4):

- 1. The tag shall be made of non-conducting material and shall be installed so as not to become energized.
- 2. The tag shall be placed in a conspicuous location and shall be secured to prevent its inadvertent removal.
- 3. The tag shall indicate,
 - i. why the equipment, installation or conductor is disconnected,
 - ii. the name of the person who disconnected the equipment,

installation or conductor,

iii. the name of the person's employer, and

iv. the date on which the equipment, installation or conductor was disconnected.

4. The tag shall not be removed unless it is safe to do so. O. Reg. 627/05, s. 7.

(7) A worker, before beginning work to which this section applies, shall verify that subsections (4) and (5) have been complied with. O. Reg. 627/05, s. 7.

(8) If more than one worker is involved in work to which this section applies, a means shall be provided to communicate the purpose and status of,

(a) the disconnecting, locking out and tagging of the electrical equipment, installation or conductor; and

(b) the discharging and containment of any hazardous stored electrical energy. O. Reg. 627/05, s. 7.

(9) Locking out is not required under subsection (4) if,

(a) in the case of a conductor, it is adequately grounded with a visible grounding mechanism;

(b) in the case of equipment or an installation,

(i) the power supply is less than 300 volts, the equipment or installation was not manufactured with provision for a locking device for the circuit breakers or fuses, and a written procedure has been implemented that is adequate to ensure that the circuit is not inadvertently energized, or

(ii) the power supply is 300 or more volts but not more than 600 volts, the equipment or installation was not manufactured with provision for a locking device for the circuit breakers or fuses, a written procedure as to how work is to be done has been implemented and the work is supervised by a competent worker to ensure that the circuit is not inadvertently energized. O. Reg. 627/05, s. 7.

191. (1) This section applies instead of section 190 if work is to be done on or near energized exposed parts of electrical equipment or of an electrical installation or conductor and,

(a) it is not reasonably possible to disconnect the equipment,

installation or conductor from the power supply before working on or near the energized exposed parts;

(b) the equipment, installation or conductor is rated at a nominal voltage of 600 volts or less, and disconnecting the equipment, installation or conductor would create a greater hazard to a worker than proceeding without disconnecting it; or

(c) the work consists only of diagnostic testing of the equipment, installation or conductor. O. Reg. 627/05, s. 7.

(2) Subsection (10) applies, in addition to subsections (3) to (9), if the equipment, installation or conductor is nominally rated at,

(a) greater than 400 amperes and greater than 200 volts; or

(b) greater than 200 amperes and greater than 300 volts. O. Reg. 627/05, s. 7.

(3) Only a worker who meets the requirements of clause 182 (1) (a) or (b) shall perform the work. O. Reg. 627/05, s. 7.

(4) The constructor shall,

(a) ensure that written measures and procedures for complying with this section are established and implemented, so that workers are adequately protected from electrical shock and burn; and

(b) make a copy of the written measures and procedures available to every employer on the project. O. Reg. 627/05, s. 7.

(5) Before a worker begins work to which this section applies, the employer shall provide a copy of the written measures and procedures to the worker and explain them to him or her. O. Reg. 627/05, s. 7.

(6) The worker shall follow the written procedures. O. Reg. 627/05, s. 7.

(7) A worker shall use mats, shields or other protective devices or equipment, including personal protective equipment, adequate to protect the worker from electrical shock and burn. O. Reg. 627/05, s. 7.

(8) If the electrical equipment, installation or conductor is rated at a nominal voltage of 300 volts or more, an adequately equipped competent worker who can perform rescue operations, including cardiopulmonary resuscitation, shall be stationed so that he or she can see the worker who is performing the work. O. Reg. 627/05, s. 7.

(9) Subsection (8) does not apply if the work consists only of diagnostic testing of the equipment, installation or conductors. O. Reg. 627/05, s. 7.

(10) In the case of equipment or of an installation or conductor

described in subsection (2), a worker shall not perform the work unless the following additional conditions are satisfied:

1. The owner of the equipment, installation or conductor has provided the employer and the constructor with a record showing that it has been maintained according to the manufacturer's specifications.
2. A copy of the maintenance record is readily available at the project.
3. The employer has determined from the maintenance record that the work on the equipment, installation or conductor can be performed safely without disconnecting it.
4. Before beginning the work, the worker has verified that paragraphs 1, 2 and 3 have been complied with. O. Reg. 627/05, s. 7.

192. All tools, devices and equipment, including personal protective equipment, that are used for working on or near energized exposed parts of electrical equipment, installations or conductors shall be designed, tested, maintained and used so as to provide adequate protection to workers. O. Reg. 627/05, s. 7.

193. (1) A worker who may be exposed to the hazard of electrical shock or burn while performing work shall use rubber gloves,

- (a) that are adequate to protect him or her against electrical shock and burn;
- (b) that have been tested and certified in accordance with subsection (2), if applicable; and
- (c) that have been air tested and visually inspected for damage and adequacy immediately before each use. O. Reg. 627/05, s. 7.

(2) Rubber gloves rated for use with voltages above 5,000 volts AC shall be tested and certified to ensure that they can withstand the voltages for which they are rated,

- (a) at least once every three months, if they are in service;
- (b) at least once every six months, if they are not in service. O. Reg. 627/05, s. 7.

(3) Rubber gloves shall be worn with adequate leather protectors and shall not be worn inside out. O. Reg. 627/05, s. 7.

(4) Leather protectors shall be visually inspected for damage and adequacy immediately before each use. O. Reg. 627/05, s. 7.

(5) Rubber gloves or leather protectors that are damaged or not adequate to protect workers from electrical shock and burn shall not be

used. O. Reg. 627/05, s. 7.

(6) Workers shall be trained in the proper use, care and storage of rubber gloves and leather protectors. O. Reg. 627/05, s. 7.

194. (1) A switch and panel board controlling a service entrance, service feeder or branch circuit shall meet the requirements of this section. O. Reg. 627/05, s. 7.

(2) A switch and panel board shall be securely mounted on a soundly constructed vertical surface and shall have a cover over uninsulated parts carrying current. O. Reg. 627/05, s. 7.

(3) A switch and panel board shall be located,

(a) in an area where water will not accumulate; and

(b) within easy reach of workers and readily accessible to them. O. Reg. 627/05, s. 7.

(4) The area in front of a panel board shall be kept clear of obstructions. O. Reg. 627/05, s. 7.

(5) A switch that controls a service entrance, service feeder or branch circuit providing temporary power,

(a) shall not be locked in the energized position; and

(b) shall be housed in an enclosure that can be locked and is provided with a locking device. O. Reg. 627/05, s. 7.

195. All electrical extension cords used at a project shall have a grounding conductor and at least two other conductors. O. Reg. 627/05, s. 7.

195.1 (1) Cord-connected electrical equipment or tools shall have a casing that is adequately grounded. O. Reg. 627/05, s. 7.

(2) All cord connections to electrical equipment or tools shall be polarized. O. Reg. 627/05, s. 7.

(3) Subsections (1) and (2) do not apply to cord-connected electrical equipment or tools that are adequately double-insulated and whose insulated casing shows no evidence of cracks or defects. O. Reg. 627/05, s. 7.

(4) Subsection (1) does not apply to a portable electrical generator in which the electrical equipment or tools are not exposed to an external electric power source if the casing of portable electrical equipment or tools connected to the generator is bonded to a non-current-carrying part of the generator. O. Reg. 627/05, s. 7.

195.2 When a portable electrical tool is used outdoors or in a wet location,

- (a) if the source of power is an ungrounded portable generator having a maximum output of 1.8 kilowatts or less, a ground fault circuit interrupter of the Class A type shall be located in the cord feeding the tool, as close to the tool as possible;
- (b) in all other cases, the tool shall be plugged into a receptacle protected by a ground fault circuit interrupter of the Class A type. O. Reg. 627/05, s. 7.

195.3 (1) Defective electrical equipment and tools that may pose a hazard shall be immediately disconnected, removed from service and tagged as being defective. O. Reg. 627/05, s. 7.

(2) The cause of a ground fault or the tripping of a ground fault circuit interrupter shall be immediately investigated to determine the hazard and corrective action shall be taken immediately. O. Reg. 627/05, s. 7.

EXPLOSIVES

196. (1) If explosives are to be used on a project, the employer responsible for blasting shall designate a competent worker to be in charge of blasting operations. O. Reg. 213/91, s. 196 (1).

(2) The employer shall post the name of the worker in charge of blasting operations for a project in a conspicuous place on the project and in every magazine. O. Reg. 213/91, s. 196 (2).

(3) The worker in charge of blasting operations for a project shall personally supervise blasting operations at the project, including the loading, priming and initiating of all charges. O. Reg. 213/91, s. 196 (3).

- (4) The worker in charge of blasting operations for a project,
 - (a) shall inspect for hazardous conditions explosives and the magazines in which they are stored,
 - (i) at least once a month, and
 - (ii) on the day they are to be used;
 - (b) shall promptly report the results of inspections under clause (a) to the supervisor in charge of the project;
 - (c) shall take immediate steps to correct any hazardous condition; and
 - (d) shall dispose of all deteriorated explosives. O. Reg. 213/91, s. 196 (4).

(5) If an act of careless placing or handling of explosives on the project is discovered by, or reported to the worker in charge of blasting operations, the worker shall promptly investigate the circumstances and report the results of the investigation to the supervisor in charge of the project. O. Reg. 213/91, s. 196 (5).

197. Only a competent worker or a worker who is working under the direct personal supervision of a competent worker shall handle, transport, prepare and use explosives on a project. O. Reg. 213/91, s. 197.

198. (1) A magazine containing an explosive shall be securely locked at all times when the competent worker described in section 197 is not present. O. Reg. 213/91, s. 198 (1).

(2) No explosive shall be outside a magazine unless the explosive is required for immediate use. O. Reg. 213/91, s. 198 (2).

(3) An explosive outside a magazine shall be attended at all times. O. Reg. 213/91, s. 198 (3).

199. An explosive shall remain in its original wrapper unless it is manufactured and intended for use other than in its original wrapper. O. Reg. 213/91, s. 199.

200. (1) No fire or other naked flame shall be located in a magazine or eight metres or less from any explosive. O. Reg. 142/17, s. 22.

(2) No person shall smoke in a magazine or eight metres or less from any explosive. O. Reg. 142/17, s. 22.

201. Blasting mats shall be used to prevent flying objects caused by blasting operations from endangering persons and property located on or adjacent to a project. O. Reg. 213/91, s. 201.

202. (1) This section applies if electric blasting caps are used on a project. O. Reg. 213/91, s. 202 (1).

(2) The protective shunt shall not be removed from the leg wire until connections are made. O. Reg. 213/91, s. 202 (2).

(3) The firing circuit shall be short-circuited while the leads from the blasting caps are being connected to each other and to the firing cables. O. Reg. 213/91, s. 202 (3).

(4) The short circuit shall not be removed until immediately before blasting and until all workers have left the area affected by the blasting operations. O. Reg. 213/91, s. 202 (4).

(5) The source of energy for a blasting operation shall be disconnected from the firing circuit immediately after firing. O. Reg. 213/91, s. 202 (5).

203. (1) Before blasting begins, the worker in charge of blasting operations shall post workers at the approaches to the affected area in order to prevent access to it. O. Reg. 213/91, s. 203 (1).

(2) Before blasting begins, the worker in charge of blasting operations shall ensure,

- (a) that only workers required to carry out the blasting are located in the affected area;
- (b) that no workers remain in an area whose means of egress passes the affected area; and
- (c) that a warning that is clearly audible within a radius of one kilometre of the blast is given by siren. O. Reg. 213/91, s. 203 (2).

204. (1) Before a drill hole for loading explosives is drilled, the exposed surface shall be examined for drill holes or remnants of drill holes that may contain explosives and any explosive found shall be removed if practicable. O. Reg. 213/91, s. 204 (1).

(2) No drill hole shall be drilled,

- (a) 7.5 metres or less from another hole that is being loaded with or contains explosives; and
- (b) 150 millimetres or less from another hole or remnant of a hole that has been charged or blasted unless adequate precautions have been taken to ensure that the other hole is free from explosives. O. Reg. 213/91, s. 204 (2); O. Reg. 142/17, s. 23 (1, 2).

(3) Clause (2) (a) does not apply to a hole being drilled adjacent to another hole that is being loaded with explosives,

- (a) if an engineer prepares a specification showing the location of the drill hole and the adjacent hole and describing the precautions to be taken to prevent the accidental detonation by the drilling operation of the explosives in the adjacent hole; and
- (b) if the drilling is done as described in the specification referred to in clause (a). O. Reg. 213/91, s. 204 (3).

(4) No drill hole permitted under subsection (3) shall be drilled one metre or less from another hole containing explosives. O. Reg. 213/91, s. 204 (4); O. Reg. 142/17, s. 23 (3).

(5) The engineer's specification shall be in writing. O. Reg. 213/91, s. 204 (5); O. Reg. 85/04, s. 20.

(6) The employer responsible for blasting shall keep a copy of the specification at the project until the blasting to which the specification

refers is completed. O. Reg. 213/91, s. 204 (6).

205. (1) If cartridges of explosives are to be used in a drill hole, the hole shall be made large enough that a cartridge can be inserted easily to the bottom of the hole. O. Reg. 213/91, s. 205 (1).

(2) No drill hole shall be charged with explosives unless a properly prepared detonation agent is placed in the charge. O. Reg. 213/91, s. 205 (2).

(3) Drill holes charged with explosives in one loading operation shall be fired in one operation. O. Reg. 213/91, s. 205 (3).

(4) No drill hole that is charged with explosives shall be left unfired for any longer than is required in a continuing operation to complete the charging and blasting of adjacent holes. O. Reg. 213/91, s. 205 (4).

206. Only a non-sparking tool or rod shall be used in the charging of a drill hole or in a drill hole containing explosives. O. Reg. 213/91, s. 206.

ROOFING

207. (1) If a built-up roof is being constructed, repaired or resurfaced, a barrier shall be placed in the immediate work area at least two metres from the perimeter of the roof. O. Reg. 213/91, s. 207 (1).

(2) The barrier shall consist of portable weighted posts supporting a taut chain, cable or rope that is located 1.1 metres above the roof level. O. Reg. 213/91, s. 207 (2).

208. (1) A pipe that supplies hot tar or bitumen to a roof shall be securely fixed and supported to prevent its deflection. O. Reg. 213/91, s. 208 (1).

(2) If a pipe discharges hot tar or bitumen two metres or less from the edge of a roof, a guardrail shall be provided at the edge of the roof. O. Reg. 213/91, s. 208 (2); O. Reg. 142/17, s. 24.

209. (1) A hoist used on a roof,

(a) shall have a guardrail installed on both sides of the frame at the edge of the roof; and

(b) shall be positioned in such a way that the hoist cable is vertical at all times while a load is being hoisted. O. Reg. 213/91, s. 209 (1).

(2) Only a competent worker shall operate a hoist used on a roof. O. Reg. 213/91, s. 209 (2).

210. The counterweights on a roofer's hoist,

(a) shall be suitable for the purpose;

- (b) shall not consist of roofing or other construction material;
- (c) shall be securely attached to the hoist; and
- (d) shall provide a safety factor against overturning of not less than three. O. Reg. 213/91, s. 210.

HOT TAR OR BITUMEN ROADTANKERS

211. (1) Only a competent worker shall operate a hot tar or bitumen roadtanker or kettle. O. Reg. 213/91, s. 211 (1).

(2) If a hot tar or bitumen roadtanker or kettle is fitted with a propane-fuelled heater,

- (a) the storage cylinder for propane shall not be placed closer than three metres to a source of fire or ignition;
- (b) the lines connecting the storage cylinder for propane to the heating device shall be located so that they do not come into contact with the hot tar or bitumen in the case of a spill or a failure of a component of the system; and
- (c) a fire extinguisher with an Underwriters' Laboratories of Canada rating of at least 4A40BC shall be provided with the roadtanker or kettle. O. Reg. 213/91, s. 211 (2).

(3) A propane burner used on a bitumen roadtanker or kettle,

- (a) shall have a thermal rating no greater than that recommended by the manufacturer of the roadtanker or kettle; and
- (b) shall consist of components that are adequate for their intended use. O. Reg. 213/91, s. 211 (3).

(4) Hot tar or bitumen shall be transferred from a roadtanker to a kettle through enclosed piping. O. Reg. 213/91, s. 211 (4).

DEMOLITION AND DAMAGED STRUCTURES

212. (1) If a structure is so damaged that a worker is likely to be endangered by its partial or complete collapse,

- (a) the structure shall be braced and shored; and
- (b) safeguards appropriate in the circumstances shall be provided to prevent injury to a worker. O. Reg. 213/91, s. 212 (1).

(2) Safeguards shall be installed progressively from a safe area towards the hazard so that the workers installing the safeguards are not endangered. O. Reg. 213/91, s. 212 (2).

213. (1) Only a worker who is directly engaged in the demolition, dismantling or moving of a building or structure shall be in, on or near it. O. Reg. 213/91, s. 213 (1).

(2) If the demolition or dismantling of a building or structure is discontinued, barriers shall be erected to prevent access by people to the remaining part of the building or structure. O. Reg. 213/91, s. 213 (2).

(3) A worker shall enter only the part of a building or structure being demolished that will safely support the worker. O. Reg. 213/91, s. 213 (3).

214. (1) No building or structure shall be demolished, dismantled or moved until this section is complied with. O. Reg. 213/91, s. 214 (1).

(2) Precautions shall be taken to prevent injury to a person on or near the project or the adjoining property that may result from the demolition, dismantling or moving of a building or structure. O. Reg. 213/91, s. 214 (2).

(3) All gas, electrical and other services that may endanger persons who have access to a building or structure shall be shut off and disconnected before, and shall remain shut off and disconnected during, the demolition, dismantling or moving of the building or structure. O. Reg. 213/91, s. 214 (3).

(4) All toxic, flammable or explosive substances shall be removed from a building or structure that is to be demolished, dismantled or moved. O. Reg. 213/91, s. 214 (4).

215. (1) Sections 216, 217, 218 and 220 do not apply with respect to a building or structure that is being demolished by,

- (a) a heavy weight suspended by cable from a crane or similar hoisting device;
- (b) a power shovel, bulldozer or other vehicle;
- (c) the use of explosives; or
- (d) a combination of methods described in clauses (a) to (c). O. Reg. 213/91, s. 215 (1).

(2) The controls of a mechanical device used to demolish a building or structure shall be operated from a location that is as remote as is practicable from the building or structure. O. Reg. 213/91, s. 215 (2).

(3) If a swinging weight is used to demolish a building or structure, the supporting cable of the weight shall be short enough or shall be so restrained that the weight does not swing against another building or structure. O. Reg. 213/91, s. 215 (3).

216. (1) Demolition and dismantling of a building or structure shall proceed systematically and continuously from the highest to the lowest point unless a worker is endangered by this procedure. O. Reg. 213/91, s. 216 (1).

(2) Despite subsection (1), the skeleton structural frame in a skeleton structural frame building may be left in place during the demolition or dismantling of the masonry if the masonry and any loose material are removed from the frame systematically and continuously from the highest to the lowest point. O. Reg. 213/91, s. 216 (2).

(3) The work above a tier or floor of a building or structure shall be completed before the support of the tier or floor is affected by demolition or dismantling operations. O. Reg. 213/91, s. 216 (3).

217. No exterior wall of a building or structure shall be demolished until all glass is removed from windows, doors, interior partitions and components containing glass or is protected to prevent the glass from breaking during the demolition. O. Reg. 213/91, s. 217.

218. (1) Masonry walls of a building or structure being demolished or dismantled shall be removed in reasonably level courses. O. Reg. 213/91, s. 218 (1).

(2) No materials in a masonry wall of a building or structure being demolished or dismantled shall be loosened or permitted to fall in masses that are likely to endanger,

- (a) a person; or
- (b) the structural stability of a scaffold or of a floor or other support of the building or structure. O. Reg. 213/91, s. 218 (2).

219. No worker shall stand on top of a wall, pier or chimney to remove material from it unless flooring, scaffolding or staging is provided on all sides of it not more than 2.4 metres below the place where the worker is working. O. Reg. 213/91, s. 219.

220. No truss, girder or other structural member of a building or structure being demolished or dismantled shall be disconnected until,

- (a) it is relieved of all loads other than its own weight; and
- (b) it has temporary support. O. Reg. 213/91, s. 220.

221. (1) A basement, cellar or excavation left after a building or structure is demolished, dismantled or moved,

- (a) shall be backfilled to grade level; or

(b) shall have fencing along its open sides. O. Reg. 213/91, s. 221 (1).

(2) Subsection (1) does not apply to a basement or cellar that is enclosed by a roof, floor or other solid covering if all openings in the roof, floor or covering are covered with securely fastened planks. O. Reg. 213/91, s. 221 (2).

PART II.1 (SS. 221.1-221.19) REVOKED: O. REG. 96/11, S. 1.

PART III

EXCAVATIONS

INTERPRETATION AND APPLICATION

222. In this Part,

“engineered support system” means an excavation or trench shoring system, designed for a specific project or location, assembled in place and which cannot be moved as a unit; (“système de soutien calculé”)

“hydraulic support system” means a system capable of being moved as a unit, designed to resist the pressure from the walls of an excavation by applying a hydraulic counterpressure through the struts; (“système de soutien hydraulique”)

“prefabricated support system” means a trench box, trench shield or similar structure, composed of members connected to each other and capable of being moved as a unit, and designed to resist the pressure from the walls of an excavation but does not include a hydraulic support system; (“système de soutien préfabriqué”)

“pressure”, in relation to a wall of an excavation, means the lateral pressure of the earth on the wall calculated in accordance with generally accepted engineering principles and includes hydrostatic pressure and pressure due to surcharge. (“pression”) O. Reg. 213/91, s. 222; O. Reg. 142/17, s. 25.

223. This Part applies to all excavating and trenching operations. O. Reg. 213/91, s. 223.

ENTRY AND WORKING ALONE

224. No person shall enter or be permitted to enter an excavation that does not comply with this Part. O. Reg. 213/91, s. 224.

225. Work shall not be performed in a trench unless another worker is working above ground in close proximity to the trench or to the means of access to it. O. Reg. 213/91, s. 225.

SOIL TYPES

226. (1) For the purposes of this Part, soil shall be classified as Type 1, 2, 3 or 4 in accordance with the descriptions set out in this section. O. Reg. 213/91, s. 226 (1).

(2) Type 1 soil,

- (a) is hard, very dense and only able to be penetrated with difficulty by a small sharp object;
- (b) has a low natural moisture content and a high degree of internal strength;
- (c) has no signs of water seepage; and
- (d) can be excavated only by mechanical equipment. O. Reg. 213/91, s. 226 (2).

(3) Type 2 soil,

- (a) is very stiff, dense and can be penetrated with moderate difficulty by a small sharp object;
- (b) has a low to medium natural moisture content and a medium degree of internal strength; and
- (c) has a damp appearance after it is excavated. O. Reg. 213/91, s. 226 (3).

(4) Type 3 soil is,

- (a) previously excavated soil; or
- (b) soil that is stiff to firm or compact to loose in consistency and has one or more of the following characteristics:
 - (i) It exhibits signs of surface cracking.
 - (ii) It exhibits signs of water seepage.
 - (iii) If it is dry, it may run easily into a well-defined conical pile.
 - (iv) It has a low degree of internal strength. O. Reg. 345/15, s. 24.

(5) Type 4 soil,

- (a) is soft to very soft and very loose in consistency, very sensitive and upon disturbance is significantly reduced in natural strength;
- (b) runs easily or flows, unless it is completely supported before excavating procedures;
- (c) has almost no internal strength;

- (d) is wet or muddy; and
- (e) exerts substantial fluid pressure on its supporting system. O. Reg. 213/91, s. 226 (5).

227. (1) The type of soil in which an excavation is made shall be determined by visual and physical examination of the soil,

- (a) at the walls of the excavation; and
- (b) within a horizontal distance from each wall equal to the depth of the excavation measured away from the excavation. O. Reg. 213/91, s. 227 (1).

(2) The soil in which an excavation is made shall be classified as the type described in section 226 that the soil most closely resembles. O. Reg. 213/91, s. 227 (2).

(3) If an excavation contains more than one type of soil, the soil shall be classified as the type with the highest number as described in section 226 among the types present. O. Reg. 213/91, s. 227 (3).

PRECAUTIONS CONCERNING SERVICES

228. (1) Before an excavation is begun,

- (a) the employer excavating shall ensure that all gas, electrical and other services in and near the area to be excavated are located and marked;
- (b) the employer and worker locating and marking the services described in clause (a) shall ensure that they are accurately located and marked; and
- (c) if a service may pose a hazard, the service shall be shut off and disconnected. O. Reg. 443/09, s. 6.

(2) If a service may pose a hazard and it cannot be shut off or disconnected, the owner of the service shall be requested to supervise the uncovering of the service during the excavation. O. Reg. 443/09, s. 6.

(3) Pipes, conduits and cables for gas, electrical and other services in an excavation shall be supported to prevent their failure or breakage. O. Reg. 443/09, s. 6.

PROTECTION OF ADJACENT STRUCTURES

229. (1) If an excavation may affect the stability of an adjacent building or structure, the constructor shall take precautions to prevent damage to the adjacent building or structure. O. Reg. 213/91, s. 229 (1).

(2) An engineer shall specify in writing the precautions required under subsection (1). O. Reg. 213/91, s. 229 (2).

(3) Such precautions as the engineer specifies shall be taken. O. Reg. 213/91, s. 229 (3).

GENERAL REQUIREMENTS

230. Every excavation that a worker may be required to enter shall be kept reasonably free of water. O. Reg. 213/91, s. 230.

231. An excavation in which a worker may work shall have a clear work space of at least 450 millimetres between the wall of the excavation and any formwork or masonry or similar wall. O. Reg. 213/91, s. 231.

232. (1) The walls of an excavation shall be stripped of loose rock or other material that may slide, roll or fall upon a worker. O. Reg. 213/91, s. 232 (1).

(2) The walls of an excavation cut in rock shall be supported by rock anchors or wire mesh if support is necessary to prevent the spalling of loose rock. O. Reg. 213/91, s. 232 (2).

233. (1) A level area extending at least one metre from the upper edge of each wall of an excavation shall be kept clear of equipment, excavated soil, rock and construction material. O. Reg. 213/91, s. 233 (1).

(2) The stability of a wall of an excavation shall be maintained where it may be affected by stockpiling excavated soil or rock or construction materials. O. Reg. 213/91, s. 233 (2).

(3) No person shall operate a vehicle or other machine and no vehicle or other machine shall be located in such a way as to affect the stability of a wall of an excavation. O. Reg. 213/91, s. 233 (3).

(4) If a person could fall into an excavation that is more than 2.4 metres deep, a barrier at least 1.1 metres high shall be provided at the top of every wall of the excavation that is not sloped as described in clauses 234 (2) (e), (f) and (g). O. Reg. 213/91, s. 233 (4).

SUPPORT SYSTEMS

234. (1) The walls of an excavation shall be supported by a support system that complies with sections 235, 236, 237, 238, 239 and 241. O. Reg. 213/91, s. 234 (1).

(2) Subsection (1) does not apply with respect to an excavation,

(a) that is less than 1.2 metres deep;

(b) that no worker is required to enter;

- (c) that is not a trench and with respect to which no worker is required to be closer to a wall than the height of the wall;
- (d) that is cut in sound and stable rock;
- (e) made in Type 1 or Type 2 soil and whose walls are sloped to 1.2 metres or less from its bottom with a slope having a minimum gradient of one vertical to one horizontal;
- (f) made in Type 3 soil and whose walls are sloped from its bottom with a slope having a minimum gradient of one vertical to one horizontal;
- (g) made in Type 4 soil and whose walls are sloped from its bottom with a slope having a minimum gradient of one vertical to three horizontal; or
- (h) that is not a trench and is not made in Type 4 soil and with respect to which an engineer has given a written opinion that the walls of the excavation are sufficiently stable that no worker will be endangered if no support system is used. O. Reg. 213/91, s. 234 (2); O. Reg. 142/17, s. 26.

(3) The opinion in clause (2) (h) shall include details of,

- (a) the specific project and the location thereon;
- (b) any specific condition for which the opinion applies; and
- (c) the frequency of inspections. O. Reg. 213/91, s. 234 (3).

(4) The constructor shall keep on the project a copy of every opinion given by an engineer for the purpose of clause (2) (h) while the project is in progress. O. Reg. 213/91, s. 234 (4).

(5) The engineer who gives an opinion described in clause (2) (h), or a competent worker designated by him or her, shall inspect the excavation to which the opinion relates as frequently as the opinion specifies. O. Reg. 213/91, s. 234 (5).

235. (1) Subject to subsection (2), a support system shall consist of,

- (a) timbering and shoring that meets the requirements of subsection 238 (2), if no hydrostatic pressure is present in the soil, and if the width and depth of the excavation are equal to or less than the width and depth indicated in the Table to section 238;
- (b) a prefabricated support system that complies with sections 236 and 237;
- (c) a hydraulic support system that complies with sections 236 and

237; or

- (d) an engineered support system that complies with section 236. O. Reg. 213/91, s. 235 (1).

(2) Where the excavation is a trench and the depth exceeds six metres or the width exceeds 3.6 metres, the support system shall consist of an engineered support system designed for the specific location and project. O. Reg. 213/91, s. 235 (2); O. Reg. 631/94, s. 7.

236. (1) Every prefabricated, hydraulic or engineered support system shall be designed by an engineer. O. Reg. 213/91, s. 236 (1).

(2) Every prefabricated, hydraulic or engineered support system shall be constructed, installed, used and maintained in accordance with its design drawings and specifications. O. Reg. 213/91, s. 236 (2).

(3) The design drawings and specifications for a prefabricated, hydraulic or an engineered support system,

- (a) shall indicate the size of the system and the type and grade of materials of which it is to be made;
- (b) shall indicate the maximum depth and the types of soil for which it is designed;
- (c) shall indicate the proper positioning of the system in the excavation, including the maximum allowable clearance between the walls of the support system and the walls of the excavation; and
- (d) shall indicate how to install and remove the system.
- (e) REVOKED: O. Reg. 85/04, s. 21.

O. Reg. 213/91, s. 236 (3); O. Reg. 85/04, s. 21.

(4) In addition to the requirements of subsection (3), the design drawings and specifications for a hydraulic support system,

- (a) shall indicate the minimum working pressure required for the system; and
- (b) shall require the use of a device to ensure the protection of workers if a loss of hydraulic pressure occurs in the system. O. Reg. 213/91, s. 236 (4).

(5) Before a variation from the design drawings and specifications for a prefabricated, hydraulic or an engineered support system is permitted, the variation shall be approved in writing by an engineer. O. Reg. 213/91, s. 236 (5).

(6) If the soil conditions on a project differ from those assumed by the engineer in designing a prefabricated, hydraulic or an engineered support system, an engineer shall modify the design drawings and specifications for the actual soil conditions or shall approve the support system for use in the actual soil conditions. O. Reg. 213/91, s. 236 (6).

(7) The constructor shall keep the design drawings and specifications for a prefabricated, hydraulic or an engineered support system at a project while the system is on the project. O. Reg. 213/91, s. 236 (7).

(8) REVOKED: O. Reg. 443/09, s. 7.

237. (1) Subject to subsection (2),

- (a) no prefabricated or hydraulic support system shall be used in type 4 soil;
- (b) the space between the walls of a prefabricated support system and the walls of the excavation shall be restricted to the minimum clearance required for the forward progression of the support system; and
- (c) the walls of a hydraulic support system shall touch the walls of the excavation. O. Reg. 631/94, s. 8.

(2) A prefabricated or hydraulic support system may be used for repairing underground pipe breaks if the system,

- (a) meets the requirements of section 236;
- (b) has four side walls;
- (c) is designed for a maximum depth of 3.6 metres;
- (d) is not used at a greater depth than 3.6 metres;
- (e) is designed to resist all hydrostatic and earth pressures found in type 3 and type 4 soils;
- (f) is installed so as to extend to the bottom of the excavation;
- (g) is installed so that the walls of the system touch the walls of the excavation; and
- (h) is not pulled forward after being installed in the excavation. O. Reg. 631/94, s. 8.

(3) Before a support system is used as described in subsection (2), the constructor shall submit two copies of its design drawings and specifications to the office of the Ministry of Labour nearest to the project. O. Reg. 631/94, s. 8.

238. (1) In this section,

“cleat” means a member of shoring that directly resists the downward movement of a wale or strut; (“tasseau”)

“o/c” means the maximum distance measured from the centre of one member of sheathing, wale or strut to the centre of the adjacent member of sheathing, wale or strut; (“c. à c.”)

“post” means a vertical member of shoring that acts as a spacer between the wales; (“montant”)

“10 millimetres gap” means that the space between two adjacent members of sheathing is a maximum of ten millimetres. (“écart de 10 millimètres”) O. Reg. 213/91, s. 238 (1).

(2) Timbering and shoring referred to in clause 235 (1) (a) for the walls of an excavation with a depth described in Column 1 of the Table to this section and located in a soil type described in Column 2 of the Table shall meet the corresponding specifications set out in Columns 3 to 8 of the Table. O. Reg. 345/15, s. 25 (1).

(3) Every piece of sheathing referred to in the Table to this section shall be made of sound Number 1 Grade spruce and,

- (a) shall be placed against the side of the excavation so that it is vertical;
- (b) shall be secured in place by wales; and
- (c) shall be driven into the soil and firmly secured in place if the excavation is made in Type 3 or 4 soil. O. Reg. 213/91, s. 238 (3).

(4) Every strut referred to in the Table to this section shall be made of sound number 1 structural grade spruce and,

- (a) shall be placed in the excavation so that it is horizontal and at right angles to the wales;
- (b) shall be cut to the proper length and held in place by at least two wedges driven between the strut and the wales; and
- (c) shall be cleated with cleats that extend over the top of the strut and rest on the wales or that are attached securely to the wales by spikes or bolts. O. Reg. 213/91, s. 238 (4).

(5) Every wale referred to in the Table to this section shall be made of sound number 1 structural grade spruce and,

- (a) shall be placed in the excavation so that it is parallel to the bottom, or proposed bottom, of the excavation; and

- (b) shall be supported by either cleats secured to the sheathing or posts set on the wale next below it or, if it is the lowest wale, on the bottom of the excavation. O. Reg. 213/91, s. 238 (5).

TABLE
EXCAVATION SHORING AND TIMBERING

Item	Column 1 Excavation Depth	Column 2 Soil Type	Column 3 Sheathing	Column 4 Strut width where width of excavation at strut location is 1.8 to 3.6 metres	Column 5 Strut width where width of excavation at strut location is up to 1.8 metres	Column 6 Vertical strut spacing	Column 7 Horizontal strut spacing	Column 8 Wales
1.	3.0 m or less	1	50 mm × 200 mm at 1.2 m o/c	200 mm × 200 mm	150 mm × 150 mm	1.2 m	* 2.4 m	*200 mm × 200 mm
2.	3.0 m or less	2	50 mm × 200 mm at 1.2 m o/c	200 mm × 200 mm	150 mm × 150 mm	1.2 m	* 2.4 m	*200 mm × 200 mm
3.	3.0 m or less	3	50 mm × 200 mm at 10 mm gap	200 mm × 200 mm	200 mm × 200 mm	1.2 m	2.4 m	250 mm × 250 mm
4.	3.0 m or less	4	75 mm × 200 mm at 10 mm gap	250 mm × 250 mm	200 mm × 200 mm	1.2 m	2.4 m	300 mm × 300 mm

5.	Over 3.0 m to 4.5 m	1	50 mm × 200 mm with 10 mm gap	200 mm × 200 mm	150 mm × 150 mm	1.2 m	2.4 m	200 mm × 200 mm
6.	Over 3.0 m to 4.5 m	2	50 mm × 200 mm with 10 mm gap	200 mm × 200 mm	200 mm × 200 mm	1.2 m	2.4 m	250 mm × 250 mm
7.	Over 3.0 m to 4.5 m	3	50 mm × 200 mm with 10 mm gap	250 mm × 250 mm	250 mm × 250 mm	1.2 m	2.4 m	250 mm × 250 mm
8.	Over 3.0 m to 4.0 m	4	75 mm × 200 mm with 10 mm gap	300 mm × 300 mm	300 mm × 300 mm	1.2 m	2.4 m	300 mm × 300 mm
9.	Over 4.5 m to 6.0 m	1	50 mm × 200 mm with 10 mm gap	200 mm × 200 mm	200 mm × 200 mm	1.2 m	2.4 m	200 mm × 200 mm
10.	Over 4.5 m to 6.0 m	2	50 mm × 200 mm with 10 mm gap	250 mm × 250 mm	250 mm × 250 mm	1.2 m	2.4 m	250 mm × 250 mm
11.	Over 4.5 m to 6.0 m	3	50 mm × 200 mm with 10 mm gap	300 mm × 300 mm	300 mm × 300 mm	1.2 m	2.4 m	300 mm × 300 mm

*Note: For excavations to 3 m deep in soil types 1 and 2, the wales can be

omitted if the struts are used at 1.2 m horizontal spacings.

O. Reg. 213/91, s. 238, Table; O. Reg. 631/94, s. 9; O. Reg. 345/15, s. 25 (2).

239. (1) A support system for the walls of an excavation shall be installed,

- (a) progressively in an excavation in Type 1, 2 or 3 soil; and
- (b) in advance of an excavation in Type 4 soil, if practicable. O. Reg. 213/91, s. 239 (1).

(2) A support system for the walls of an excavation shall provide continuous support for it. O. Reg. 213/91, s. 239 (2).

(3) No support system for the walls of an excavation shall be removed until immediately before the excavation is backfilled. O. Reg. 213/91, s. 239 (3).

(4) A competent person shall supervise the removal of a support system for the walls of an excavation. O. Reg. 213/91, s. 239 (4).

240. If a support system is used for the walls of an excavation, a ladder for access to or egress from the excavation shall be placed within the area protected by the support system. O. Reg. 213/91, s. 240.

241. (1) A support system for the walls of an excavation shall extend at least 0.3 metres above the top of the excavation unless otherwise permitted or required by this section. O. Reg. 213/91, s. 241 (1).

(2) If an excavation is located where there is vehicular or pedestrian traffic and if the excavation will be covered when work on or in it is not in progress, the support system for the walls of the excavation shall extend at least to the top of the excavation. O. Reg. 213/91, s. 241 (2).

(3) If the upper portion of the walls of an excavation are sloped for the soil types as described in clauses 234 (2) (e), (f) and (g) and the lower portion of the walls are vertical or near vertical, the walls shall be supported by a support system which extends at least 0.5 metres above the vertical walls. O. Reg. 213/91, s. 241 (3).

242. (1) A metal trench-jack or trench-brace may be used in place of a timber strut,

- (a) if the allowable working load of the trench-jack or trench-brace is equal to or greater than that of the timber strut; and
- (b) if the size of the replaced timber strut is shown on the trench-jack or trench-brace. O. Reg. 213/91, s. 242 (1).

(2) The allowable working load of a metal trench-jack or trench-brace shall be determined by an engineer in accordance with good engineering practice and shall be legibly cast or stamped on the trench-jack or trench-brace. O. Reg. 213/91, s. 242 (2).

(3) No metal trench-jack or trench-brace shall be extended beyond the length used to establish its maximum allowable working load. O. Reg. 213/91, s. 242 (3).

(4) Every metal trench-jack or trench-brace, when it is used,

- (a) shall be placed against the wales in such a way that the load from the wales is applied axially to the trench-jack or trench-brace; and
- (b) shall be adequately supported so that it does not move out of position. O. Reg. 213/91, s. 242 (4).

PART IV

TUNNELS, SHAFTS, CAISSONS AND COFFERDAMS

APPLICATION

243. This Part applies with respect to,

- (a) tunnels and shafts other than those located at or used in connection with a mine; and
- (b) caissons and cofferdams. O. Reg. 213/91, s. 243.

LAND REQUIREMENTS

244. A tunnel or shaft shall be commenced or started only where sufficient land space is available to permit compliance with Parts IV and V. O. Reg. 213/91, s. 244.

NOTICE

245. (1) An employer who will be constructing a tunnel, shaft, caisson or cofferdam shall file a notice with a Director before beginning work on a tunnel, shaft, caisson or cofferdam. O. Reg. 213/91, s. 245 (1); O. Reg. 145/00, s. 33 (1).

(2) The notice shall,

- (a) describe the work;
- (b) provide specifications and drawings showing profiles, transverse sections and plans for the tunnel, shaft, caisson or cofferdam signed and sealed by the engineer who designed the support system for the tunnel, shaft, caisson or cofferdam;

- (c) provide complete details of all temporary and permanent ground support;
- (d) state the name, mailing address, address for service and telephone number of the constructor, of the owner and of the employer in charge of the work;
- (e) state the name of the supervisor in charge of the work and the supervisor's mailing address, address for service and telephone number;
- (f) provide the municipal address of the work or include a description of its location relative to the nearest highway such that the Director is able to locate the work;
- (g) state the starting date and the anticipated duration of the work;
- (h) state the estimated total cost for labour and materials for the work; and
- (i) list all designated substances that may be used, handled or disturbed by the work. O. Reg. 213/91, s. 245 (2); O. Reg. 145/00, s. 33 (2).

WORKING ALONE AND ENTRY

246. Work shall not be performed in a shaft, tunnel, caisson or cofferdam unless another worker is working above ground in close proximity to the shaft, tunnel, caisson or cofferdam or to the means of access to it. O. Reg. 213/91, s. 246.

247. (1) No worker shall enter a well or augered caisson where the excavation is deeper than 1.2 metres unless,

- (a) a steel liner of adequate capacity is installed in the well or caisson;
- (b) the requirements of Ontario Regulation 632/05 (Confined Spaces) made under the Act are complied with; and
- (c) the worker is inside the steel liner and is wearing a fall arrest system with a full body harness secured to a fixed support. O. Reg. 213/91, s. 247 (1); O. Reg. 628/05, s. 4; O. Reg. 96/11, s. 2; O. Reg. 142/17, s. 27 (1).

(2) A steel liner,

- (a) shall extend sixty centimetres above ground level and to a point that is 1.2 metres or closer to the point in the well or caisson where work is being done;
- (b) shall be supported on two sides by steel wire rope and steel beams;

and

- (c) shall have a diameter which is not less than 100 millimetres less than the diameter of the excavation. O. Reg. 213/91, s. 247 (2); O. Reg. 142/17, s. 27 (2).

FIRE PROTECTION

248. Notices describing how to sound a fire alarm shall be posted in conspicuous places on a project to which this Part applies. O. Reg. 213/91, s. 248.

249. (1) A means of extinguishing fire shall be provided,

- (a) at the top and bottom of every shaft;
- (b) if a project consists of or includes a tunnel, at each panel board for electricity, on each electric-powered locomotive and at each battery charging station; and
- (c) 30 metres or less from each work face of a tunnel and of each location where a fire hazard exists. O. Reg. 213/91, s. 249 (1); O. Reg. 142/17, s. 28.

(2) The means of extinguishing fire shall be inspected at least once a week to ensure that it is in working order. O. Reg. 213/91, s. 249 (2).

250. (1) A fire suppression system for equipment that contains flammable hydraulic fluids shall be provided while the equipment is underground. O. Reg. 213/91, s. 250 (1).

(2) A fire suppression system shall include a dry chemical fire extinguisher with an Underwriters' Laboratories of Canada rating of at least 4A40BC. O. Reg. 345/15, s. 26.

251. (1) If the diameter of a tunnel will be equal to or greater than 1.5 metres when it is completed, a standpipe, a fire line and a hose shall be provided in the tunnel. O. Reg. 213/91, s. 251 (1).

(2) A siamese connection shall be provided on the fire line at the surface of the shaft. O. Reg. 213/91, s. 251 (2).

252. (1) Every standpipe in a shaft or tunnel,

- (a) shall be made of metal pipe that has at least a fifty-one millimetres inside diameter; and
- (b) shall have a connection for the use of the local fire department outside the shaft or tunnel to which there is clear and ready access at all times. O. Reg. 213/91, s. 252 (1); O. Reg. 142/17, s. 29.

(2) Every standpipe in a shaft shall be installed progressively as the shaft is excavated. O. Reg. 213/91, s. 252 (2).

253. (1) Every fire line in a tunnel,

(a) shall be made of metal pipe that has at least a fifty-one millimetres inside diameter; and

(b) shall have, at intervals of not more than forty-five metres along it, an outlet with a valve. O. Reg. 213/91, s. 253 (1).

(2) Every fire line in a tunnel shall be installed progressively as the tunnel is excavated. O. Reg. 213/91, s. 253 (2).

254. (1) Every hose in a tunnel,

(a) shall have at least a thirty millimetres inside diameter;

(b) shall have a combination straight stream and fog nozzle; and

(c) shall be at least twenty-three metres long. O. Reg. 213/91, s. 254 (1).

(2) A hose shall be provided in a tunnel at forty-six metre intervals horizontally along it. O. Reg. 213/91, s. 254 (2).

(3) Every hose shall be stored on a rack when it is not in use so as to be readily available. O. Reg. 213/91, s. 254 (3).

255. (1) No flammable liquid or gas shall be brought underground except as permitted by this section. O. Reg. 213/91, s. 255 (1).

(2) A compressed gas storage cylinder to which gas welding or flame-cutting equipment is attached may be brought underground. O. Reg. 213/91, s. 255 (2).

(3) Fuel may be brought underground if,

(a) it is in a tank that is supplied with and that forms a part of an engine or heating device; or

(b) it is in a container and is intended for transfer into a tank described in clause (a). O. Reg. 213/91, s. 255 (3).

(4) The maximum amount of fuel that may be brought underground in a container referred to in clause (3) (b) is the amount required for eight hours use of the engine or heating device. O. Reg. 213/91, s. 255 (4).

256. (1) A flammable liquid or gas shall be stored,

(a) as far as is practicable from a shaft; and

(b) in a place from which it is impossible for spilled liquid to flow

underground. O. Reg. 213/91, s. 256 (1).

(2) Lubricating oil shall be stored in a suitable building or storage tank located in a place from which spilled liquid cannot run toward any shaft or tunnel. O. Reg. 213/91, s. 256 (2).

257. Oil for use in hydraulic-powered equipment underground shall be of the type that,

- (a) is not readily flammable; and
- (b) does not readily support combustion. O. Reg. 213/91, s. 257.

258. (1) No combustible equipment, including welding cable and air-hoses, shall be stored underground unless the equipment is required for immediate use. O. Reg. 213/91, s. 258 (1).

(2) No electrical cable or gas hose shall be taken or used underground unless,

- (a) it has an armoured casing or jacket made of a material that is not readily flammable and that does not readily support combustion; and
- (b) it is marked to indicate that it has the casing or jacket required by clause (a). O. Reg. 213/91, s. 258 (2).

259. (1) No combustible rubbish, used or decayed timber, scrap wood or paper shall be accumulated underground. O. Reg. 213/91, s. 259 (1).

(2) Material described in subsection (1) shall be promptly removed from underground. O. Reg. 213/91, s. 259 (2).

FACILITIES FOR WORKERS

260. (1) A heated room shall be provided for the use of underground workers. O. Reg. 213/91, s. 260 (1).

(2) The wet clothes of workers employed underground shall be dried using sanitary means in a change room on the project. O. Reg. 213/91, s. 260 (2).

- (3) A change room,
 - (a) shall have an open floor area no smaller than the greater of,
 - (i) ten square metres, and
 - (ii) one square metre per worker on a shift;
 - (b) shall be equipped with mechanical ventilation that provides no less than six air changes per hour;

- (c) shall have suitable drainage facilities;
- (d) shall be kept at a temperature of at least 27 degrees celsius; and
- (e) shall have, for every worker employed underground, a locker that locks. O. Reg. 213/91, s. 260 (3).

(4) Every change room shall be scrubbed once every twenty-four hours. O. Reg. 213/91, s. 260 (4).

(5) If workers are employed underground, a change room shall be provided with one shower and one washbasin for each group of ten or fewer workers. O. Reg. 213/91, s. 260 (5).

(6) Showers and washbasins provided in a change room shall be supplied with hot and cold water, soap or hand cleaner and paper towels or individual hand towels. O. Reg. 213/91, s. 260 (6).

FIRST AID

261. The supervisor in charge of a project shall appoint at least one competent worker to be available to give first aid at a shaft or tunnel. O. Reg. 213/91, s. 261.

262. (1) A first aid kit shall be kept in the immediate vicinity of the above-ground entrance to every shaft, tunnel, caisson or cofferdam. O. Reg. 213/91, s. 262 (1).

(2) At least one first aid kit shall be kept underground in every shaft and tunnel. O. Reg. 213/91, s. 262 (2).

263. (1) At least one stretcher for each group of twenty-five or fewer workers who are underground shall be kept at every tunnel, shaft or cofferdam. O. Reg. 213/91, s. 263 (1).

(2) Every stretcher shall be a wire-basket type and shall be designed and equipped to permit the safe hoisting and transport of a worker. O. Reg. 213/91, s. 263 (2).

RESCUE OF WORKERS

264. (1) Before a project begins, an employer shall establish in writing emergency procedures for the rescue of underground workers. O. Reg. 213/91, s. 264 (1).

(2) Copies of the rescue procedures signed by the employer and supervisor of the underground workers shall be posted in conspicuous places on the project. O. Reg. 213/91, s. 264 (2).

(3) The emergency procedures shall be practised in preparation for an

emergency and shall be followed in an emergency. O. Reg. 213/91, s. 264 (3).

265. (1) At least four workers at a project or, if fewer than four workers work at the project, all workers shall be trained in and readily available to perform rescues of underground workers. O. Reg. 213/91, s. 265 (1).

(2) Rescue workers shall be provided with suitable equipment to perform rescues. O. Reg. 213/91, s. 265 (2).

(3) Rescue workers shall be trained by a competent person appointed by a Director. O. Reg. 213/91, s. 265 (3); O. Reg. 145/00, s. 34 (1).

(4) A Director who makes an appointment described in subsection (3) shall, in doing so, consider any recommendations of the representatives of labour and of management. O. Reg. 145/00, s. 34 (2).

(5) Rescue workers shall be trained within thirty days before tunnelling operations begin and retrained at least every thirty days after the initial training. O. Reg. 213/91, s. 265 (5).

(6) Before a project begins, the supervisor of the construction of a tunnel shall designate a rescue worker who shall inspect and test all rescue equipment every thirty days. O. Reg. 213/91, s. 265 (6).

266. (1) This section applies if, on a project, there is a tunnel and shaft whose combined length exceeds forty-five metres. O. Reg. 213/91, s. 266 (1).

(2) Every rescue worker shall be provided with a self-contained breathing apparatus that meets the requirements of subsection (5) and subsection (6), (7) or (8), as is appropriate to the length of the underground work place. O. Reg. 213/91, s. 266 (2).

(3) A competent person referred to in subsection 265 (3) shall train rescue workers in the proper operation of the self-contained breathing apparatus. O. Reg. 213/91, s. 266 (3).

(4) The training required by subsection (3) shall be repeated at least every thirty days. O. Reg. 213/91, s. 266 (4).

(5) The self-contained breathing apparatus shall have a full face mask. O. Reg. 213/91, s. 266 (5).

(6) For use in an underground work place that is less than 100 metres long, the minimum rated duration of use for a self-contained breathing apparatus shall be one-half hour. O. Reg. 213/91, s. 266 (6).

(7) For use in an underground work place that is 100 metres or more but less than 150 metres long, the minimum rated duration of use for a

self-contained breathing apparatus shall be one hour. O. Reg. 213/91, s. 266 (7).

(8) For use in an underground work place that is 150 metres or more long, the minimum rated duration of use for a self-contained breathing apparatus shall be one and one-half hours. O. Reg. 213/91, s. 266 (8).

(9) All self-contained breathing apparatuses intended for rescue work on a project shall be the same model and made by the same manufacturer. O. Reg. 213/91, s. 266 (9).

(10) All self-contained breathing apparatuses shall be kept in close proximity to the means of access to an underground work place and shall be readily available. O. Reg. 213/91, s. 266 (10).

(11) A sufficient number, four as a minimum, of self-contained breathing apparatuses shall be available on the project to provide for all rescue work that may be required. O. Reg. 213/91, s. 266 (11).

(12) A competent person shall inspect every self-contained breathing apparatus at least once a month or as often as is required by the manufacturer to ensure it is in proper condition. O. Reg. 213/91, s. 266 (12).

267. Every worker who is in, or may be required to enter, a tunnel or a shaft leading to it shall be provided with a self-rescue respirator for the worker's exclusive use which is suitable for protection against hazardous gases. O. Reg. 631/94, s. 10.

268. (1) A worker's self-rescue respirator shall be kept in the vicinity of the worker while he or she is in a tunnel or shaft. O. Reg. 213/91, s. 268 (1).

(2) All workers on a tunnel project shall be instructed in the proper use, care, maintenance and limitations of the self-rescue respirator in accordance with the manufacturer's specifications. O. Reg. 213/91, s. 268 (2).

COMMUNICATIONS

269. (1) Subject to subsection (2), a telephone connected to a public telephone system shall be installed at a project that is to be over fourteen days duration. O. Reg. 213/91, s. 269 (1).

(2) If it is not practicable to install at a project a telephone connected to a public telephone system, a radio telephone shall be available that permits communication with an office of the constructor that has a telephone connected to a public telephone system. O. Reg. 213/91, s. 269 (2).

(3) At a project of fourteen or fewer days duration, before work is begun, a public telephone or a radio telephone shall be installed or shall be arranged for nearby if,

- (a) the services of a police or fire department or ambulance are reasonably available; and
- (b) prompt direct telephone communication is possible with the police or fire department or ambulance. O. Reg. 213/91, s. 269 (3).

270. (1) A telephone system shall be provided at a tunnel if the work at the face of the tunnel is or will be done twenty-three metres or more from,

- (a) the top of the service shaft; or
- (b) the opening into the tunnel, if the tunnel is not constructed from a service shaft. O. Reg. 213/91, s. 270 (1).

(2) A telephone system shall be installed before work on the tunnel is begun. O. Reg. 213/91, s. 270 (2).

(3) A telephone system shall consist of telephones that are located,

- (a) in the office of the supervisor in charge of the project;
- (b) at the top and bottom of the service shaft or at the opening into the tunnel, if the tunnel is not constructed from a service shaft;
- (c) at all other means of access to the service shaft, if any; and
- (d) at intervals not exceeding thirty metres in every area of the tunnel where work is being performed. O. Reg. 213/91, s. 270 (3).

(4) A notice shall be posted by each telephone,

- (a) indicating how to call every other telephone in the system;
- (b) describing the emergency signal to be used; and
- (c) stating that a worker who hears the emergency signal shall answer the telephone. O. Reg. 213/91, s. 270 (4).

(5) A telephone system shall be installed in such a way that a conversation can be carried on between any two telephones in the system. O. Reg. 213/91, s. 270 (5).

(6) The voice communication circuits used in a telephone system shall be independent from the circuits used to signal from one telephone to another. O. Reg. 213/91, s. 270 (6).

271. During the construction of a shaft, an effective means of

communicating between the lowest point of the shaft and the surface shall be provided. O. Reg. 213/91, s. 271.

272. A completed service shaft more than six metres deep shall have a means, other than a telephone, of exchanging distinct and definite signals between the top and bottom of the shaft. O. Reg. 213/91, s. 272.

273. (1) If a person is about to be conveyed by a hoist in a shaft, the pit bottom worker shall notify the hoist operator before the person enters the conveyance. O. Reg. 213/91, s. 273 (1).

(2) A hoist operator shall acknowledge every signal received by repeating the signal. O. Reg. 213/91, s. 273 (2).

(3) A signal to a hoist operator to move a conveyance shall be given only from the landing from which the conveyance is being moved. O. Reg. 213/91, s. 273 (3).

(4) A signal set out in Column 1 of the Table shall be used to communicate the meaning set out opposite to it in Column 2 between a hoist operator, the top or bottom of a shaft and all landings in the shaft:

TABLE

Item	Column 1 Code of signals	Column 2 Meaning
1.	Where the conveyance is in motion – 1 signal	STOP
2.	Where the conveyance is stationary – 1 signal	HOIST
3.	Where the conveyance is stationary – 2 signals together	LOWER
4.	Where the conveyance is stationary – 3 signals together (to be given before any person enters the conveyance)	Person will be on conveyance. OPERATE CAREFULLY.

O. Reg. 345/15, s. 27.

(5) The supervisor in charge of a project may establish signals in addition to those set out in subsection (4) if required for the operation of a hoist on the project. O. Reg. 213/91, s. 273 (5).

(6) A notice setting out the signals used for a hoist shall be securely posted,

(a) where it is readily visible to the hoist operator; and

(b) at each landing of the hoistway. O. Reg. 213/91, s. 273 (6).

(7) The notice shall be on a board or a metal plate that is not less than 450 millimetres by 450 millimetres and shall be written in letters that are at least thirteen millimetres high. O. Reg. 213/91, s. 273 (7).

LIGHTING AND ELECTRICITY SUPPLY

274. All electrical circuits of 100 volts or more shall be in an insulated cable that consists of at least two conductors and a grounding conductor. O. Reg. 627/05, s. 8.

275. All electrical pumps and electrical tools shall be either adequately grounded or double-insulated. O. Reg. 213/91, s. 275.

276. (1) An area of a tunnel or shaft that is not adequately lit by natural light shall be electrically illuminated. O. Reg. 213/91, s. 276 (1).

(2) Flashlights shall be readily available at the top and bottom of every shaft and near the work face of a tunnel. O. Reg. 213/91, s. 276 (2).

(3) If electric lighting is used in a tunnel or shaft, an emergency lighting system shall be installed in the tunnel or shaft. O. Reg. 213/91, s. 276 (3).

(4) An emergency lighting system,

- (a) shall be connected to the electrical supply so that in the event of the failure of the electrical supply, the system will automatically turn on;
- (b) shall be provided with a testing switch, if the system is battery-powered; and
- (c) shall be tested at least as frequently as is recommended by its manufacturer to ensure that the system will function in an emergency. O. Reg. 213/91, s. 276 (4).

277. REVOKED: O. Reg. 627/05, s. 9.

SHAFTS

278. (1) Every shaft shall be large enough that its walls can be adequately shored and shall have enough clear space for work to be done. O. Reg. 213/91, s. 278 (1).

(2) In a service shaft that is more than six metres deep or that serves a tunnel more than fifteen metres long,

- (a) the minimum inside dimension of the shaft, measured between the wales or other wall supports, shall be 2.4 metres for a cylindrical shaft and 1.5 metres for a shaft that is not cylindrical; and
- (b) the minimum transverse cross-sectional area of a shaft that is not

cylindrical shall be 5.7 square metres. O. Reg. 213/91, s. 278 (2).

279. (1) The walls of a shaft shall be supported by shoring and bracing adequate to prevent their collapse. O. Reg. 213/91, s. 279 (1).

(2) Subsection (1) does not apply to the walls of a shaft that is less than 1.2 metres deep or is cut in sound rock. O. Reg. 213/91, s. 279 (2).

(3) If a shaft is to be cut in sound rock, the constructor shall obtain a written opinion from an engineer as to whether the walls of the shaft need to be supported by rock bolts or wire mesh to prevent the spalling of loose rock. O. Reg. 213/91, s. 279 (3).

(4) The walls of a shaft cut in sound rock shall be supported by rock bolts or wire mesh where necessary in the opinion of the engineer. O. Reg. 213/91, s. 279 (4).

280. (1) Shoring and bracing for a shaft that is more than 1.2 metres deep shall be capable of withstanding all loads likely to be applied to them. O. Reg. 213/91, s. 280 (1).

(2) The shoring and bracing,

(a) shall be designed by an engineer in accordance with good engineering practice; and

(b) shall be constructed in accordance with the engineer's design. O. Reg. 213/91, s. 280 (2).

(3) Design drawings by an engineer for the shoring and bracing shall show the size and specifications of the shoring and bracing including the type and grade of all materials to be used in their construction. O. Reg. 213/91, s. 280 (3).

(4) REVOKED: O. Reg. 443/09, s. 8.

(5) The constructor shall keep a copy of design drawings for the shoring and bracing at the project while the shoring and bracing are in use. O. Reg. 213/91, s. 280 (5).

281. (1) If a square or rectangular shaft is not more than six metres deep and has walls that are not more than 3.6 metres wide, the walls,

(a) shall be fully sheathed with Number 1 Grade spruce planks that are at least fifty-one millimetres thick by 152 millimetres wide and are placed side by side; and

(b) shall be supported by wales and struts. O. Reg. 213/91, s. 281 (1); O. Reg. 631/94, s. 11.

(2) Wales and struts,

- (a) shall be made of number 1 structural grade spruce planks that are,
 - (i) at least 152 millimetres by 152 millimetres, for a shaft that is not more than 2.7 metres deep,
 - (ii) at least 203 millimetres by 203 millimetres, for a shaft that is more than 2.7 metres but not more than 4.3 metres deep, and
 - (iii) at least 254 millimetres by 254 millimetres, for a shaft that is more than 4.3 metres but not more than six metres deep;
- (b) shall be spaced not more than 1.2 metres apart vertically; and
- (c) shall be adequately supported by vertical posts that extend to the bottom of the shaft. O. Reg. 213/91, s. 281 (2).

282. (1) An adequate barrier that is at least 1.1 metres high shall be provided around the top of an uncovered shaft. O. Reg. 213/91, s. 282 (1).

(2) A barrier around the top of an uncovered shaft that is more than 2.4 metres deep,

- (a) shall consist of a top rail, an intermediate rail and a toe-board; and
- (b) shall be made of thirty-eight by 140 millimetres lumber securely fastened to vertical supports that are spaced at intervals of not more than 2.4 metres. O. Reg. 213/91, s. 282 (2).

(3) A barrier shall be kept free of splinters and protruding nails. O. Reg. 213/91, s. 282 (3).

(4) A gate in a barrier around the top of an uncovered shaft shall be kept closed and latched. O. Reg. 213/91, s. 282 (4).

(5) The ground adjacent to a barrier around the top of a shaft shall be sloped away from the barrier. O. Reg. 213/91, s. 282 (5).

283. A shaft shall be kept clear of ice and loose objects that may endanger a worker. O. Reg. 213/91, s. 283.

284. A shaft shall be kept reasonably free of water when a worker is required to be in the shaft. O. Reg. 213/91, s. 284.

285. Every shaft shall have a means of access and egress by stairway, ladder or ladderway for its full depth during its construction and when it is completed. O. Reg. 213/91, s. 285.

286. (1) A stairway, ladder or ladderway for a shaft that is more than six metres deep,

- (a) shall have landings or rest platforms spaced at intervals not greater

than 4.5 metres;

(b) shall be off-set at each landing or rest platform; and

(c) shall be located in a sheathed compartment that is constructed in such a way that a worker who falls while on the stairway, ladder or ladderway will land on the landing or rest platform below. O. Reg. 213/91, s. 286 (1).

(2) Every landing and rest platform shall be wide enough to permit at least two workers to pass on it safely. O. Reg. 213/91, s. 286 (2).

(3) Every opening and ladderway shall be wide enough to permit the passage of a worker wearing rescue equipment and shall be at least 750 mm by 750 mm. O. Reg. 631/94, s. 12; O. Reg. 345/15, s. 28.

287. (1) Every conveyance located in a service shaft that is more than six metres deep shall be separated from a stairway, ladder or ladderway in the shaft by a lining described in subsection (3). O. Reg. 213/91, s. 287 (1).

(2) Subsection (1) does not apply with respect to a conveyance located in a service shaft if the hoisting area is so remote from the stairway, ladder or ladderway that it is not possible for a load, bucket or device being hoisted or lowered to come into contact with the stairway, ladder or ladderway. O. Reg. 213/91, s. 287 (2).

(3) A lining shall consist of solid planks at least fifty-one millimetres thick and spaced not more than ten millimetres apart. O. Reg. 213/91, s. 287 (3).

HOISTWAYS

288. (1) This section applies with respect to a hoistway that is more than six metres deep in which hoisting is carried out by mechanical power. O. Reg. 213/91, s. 288 (1).

(2) Every landing on a hoistway shall have a gate located 200 millimetres or less from the hoistway that,

(a) extends the full width of the hoistway from 50 millimetres or less from the floor level to a height of at least 1.8 metres;

(b) is constructed without any gaps that would permit the entry of a ball no more than thirty-eight millimetres in diameter; and

(c) is equipped with a light readily visible to the hoist operator indicating when the gate is closed. O. Reg. 213/91, s. 288 (2); O. Reg. 142/17, s. 30.

(3) Subsection (2) does not apply to a landing at the bottom of a hoistway if the landing has one or more red lights that,

- (a) are located where a person approaching the hoistway from a tunnel or from the lower end of a stair or ladder can see at least one of them; and
- (b) are controlled by a switch readily accessible to a shaft attendant. O. Reg. 213/91, s. 288 (3).

(4) A gate required by subsection (2) shall be kept closed unless a conveyance is stopped at the landing. O. Reg. 213/91, s. 288 (4).

(5) The red lights referred to in subsection (3) shall be continuously flashed off and on during a hoisting operation. O. Reg. 213/91, s. 288 (5).

289. (1) All parts of a hoisting apparatus used in a hoistway or shaft shall be able to be conveniently inspected. O. Reg. 213/91, s. 289 (1).

(2) Every hoist drum shall have a flange at each end to keep the hoist rope on the drum. O. Reg. 213/91, s. 289 (2).

290. (1) A hoist operator shall operate and watch over a hoist and all machinery associated with the hoist to detect any hazardous conditions. O. Reg. 213/91, s. 290 (1).

(2) A hoist operator shall report immediately to the supervisor in charge of the project any defects in the hoisting machinery and safety devices. O. Reg. 213/91, s. 290 (2); O. Reg. 142/17, s. 31.

(3) The hoist operator shall test all safety devices on a hoisting apparatus to ensure that they function and shall perform the tests,

- (a) before a conveyance is first put into service on a project;
- (b) at least once every three months after being put into service on the project; and
- (c) daily, if the hoisting apparatus is used to hoist persons. O. Reg. 213/91, s. 290 (3).

(4) The hoist operator shall make a record of tests performed under subsection (3). O. Reg. 213/91, s. 290 (4).

(5) The hoist operator shall keep available for inspection at the project the record of tests performed under subsection (3). O. Reg. 213/91, s. 290 (5).

291. (1) No person other than a competent worker appointed by the supervisor in charge of a project shall operate a hoist in a hoistway or shaft. O. Reg. 213/91, s. 291 (1).

(2) No person, other than a worker required to do so as a part of the worker's job, shall enter or attend the machine room of a hoist. O. Reg. 213/91, s. 291 (2).

292. A hoist operator shall inspect the hoisting machinery and safety devices connected to it at least once a day and shall make a record of the inspection in a log book. O. Reg. 213/91, s. 292; O. Reg. 142/17, s. 32.

293. (1) A hoist operator and all shaft attendants shall understand the signal code established for the hoist. O. Reg. 213/91, s. 293 (1).

(2) No hoist operator shall converse with another person while the hoist is in motion or signals are being given. O. Reg. 213/91, s. 293 (2).

(3) No hoist operator shall turn over the controls of a hoist to another person while a conveyance is in motion. O. Reg. 213/91, s. 293 (3).

(4) No hoist operator shall operate a hoist,

(a) unless it is equipped with,

(i) indicators showing the position of the conveyance on the hoist, and

(ii) brakes and distance markers on the hoisting ropes and cables;

(b) in a compartment of a shaft in which work is being done unless the hoist is being operated for the purpose of work in the compartment. O. Reg. 213/91, s. 293 (4).

(5) After a hoist has been stopped for repairs, a hoist operator shall run an empty conveyance up and down the shaft at least once and shall determine that the hoist is in good working order before carrying a load in it. O. Reg. 213/91, s. 293 (5).

294. (1) The supervisor in charge of a project,

(a) shall establish the maximum speed for a conveyance transporting persons in a hoistway; and

(b) shall determine the maximum number of persons and the maximum weight of material that may be carried safely on a conveyance in a hoistway. O. Reg. 213/91, s. 294 (1).

(2) A notice setting out the maximums referred to in subsection (1) shall be conspicuously posted near each hoistway entrance. O. Reg. 213/91, s. 294 (2).

(3) No person shall load a conveyance in a hoistway beyond the maximum limits established under clause (1) (b). O. Reg. 213/91, s. 294 (3).

(4) A hoist operator shall operate a hoist in accordance with the notice posted under subsection (2). O. Reg. 213/91, s. 294 (4).

295. (1) The supervisor in charge of a project shall appoint shaft attendants for a shaft where a hoist is being used. O. Reg. 213/91, s. 295 (1).

(2) No shaft attendant shall be less than nineteen years of age. O. Reg. 213/91, s. 295 (2).

(3) At least one shaft attendant shall be on duty at the top of a shaft if a hoist, crane or similar hoisting device is being used or if a worker is present in the shaft or in a tunnel connected to the shaft. O. Reg. 213/91, s. 295 (3).

(4) A shaft attendant,

(a) shall give the hoist operator the signals for starting and stopping the hoist;

(b) shall warn workers of hazards in or near the shaft; and

(c) as far as is practicable, shall remove known hazards. O. Reg. 213/91, s. 295 (4).

296. (1) The supervisor in charge of a project shall, before a hoist is used on the project, establish a communication system of signals to be used between a hoist operator, shaft attendants and any other attendants working at a hoist. O. Reg. 213/91, s. 296 (1).

(2) The supervisor in charge of a project shall ensure that all hoist operators, shaft attendants and other attendants working at a hoist know and understand the signals. O. Reg. 213/91, s. 296 (2).

297. (1) The supervisor in charge of a project shall appoint workers to control the movement of materials to and from a conveyance on a hoist at every landing and at the bottom of a shaft. O. Reg. 213/91, s. 297 (1).

(2) A worker appointed under subsection (1) shall control and direct the movement of materials to and from a conveyance. O. Reg. 213/91, s. 297 (2).

298. No worker shall be transported in a conveyance or a hoist while it is being used to carry materials or equipment other than hand tools or similar small objects. O. Reg. 213/91, s. 298.

299. The path of travel of an object being hoisted from or lowered into a shaft by a crane shall not pass over a manway unless the manway has adequate overhead protection. O. Reg. 213/91, s. 299.

300. (1) A service shaft that will be over thirty metres deep when

completed shall have a hoist with a conveyance consisting of a cage or car suitable for transporting workers. O. Reg. 213/91, s. 300 (1).

(2) A hoist shall be installed in the service shaft as soon as is practicable. O. Reg. 213/91, s. 300 (2).

(3) A hoist,

- (a) shall have a headframe that is grounded for protection against lightning and is designed by an engineer;
- (b) shall have guides to control the movement of the conveyance;
- (c) shall have a device that automatically stops the conveyance when it runs beyond the normal limit of its travel; and
- (d) shall have a brake on the hoisting machine that automatically stops and holds the conveyance if the hoist fails or the power to the hoist is interrupted. O. Reg. 213/91, s. 300 (3); O. Reg. 142/17, s. 33.

(4) A shaft in sound rock may be excavated to a depth of not more than thirty metres before the headframe and guides are installed on the hoist. O. Reg. 213/91, s. 300 (4).

301. (1) Every conveyance on a hoist used for transporting workers in a shaft shall have a suitable device that, if the cable breaks or becomes slack,

- (a) automatically prevents the conveyance from falling; and
- (b) is capable of holding the conveyance stationary when it contains the maximum number of passengers it is permitted to carry. O. Reg. 213/91, s. 301 (1).

(2) Subsection (1) does not apply with respect to a bucket or a skip operated in accordance with sections 303 and 305. O. Reg. 213/91, s. 301 (2).

(3) A device shall be installed to warn the hoist operator when a conveyance transporting workers in a shaft has reached the normal limit of its travel. O. Reg. 213/91, s. 301 (3).

302. (1) A cage or car on a hoist used for transporting workers in a shaft,

- (a) shall be at least 1.8 metres high;
- (b) shall be solidly enclosed, except for openings for access and egress;
- (c) shall have a maximum of two openings for access and egress;
- (d) shall have a gate at each opening for access and egress; and

(e) shall have a protective cover suitable to protect passengers from falling objects. O. Reg. 213/91, s. 302 (1).

(2) A gate for access and egress,

(a) shall be constructed without any gaps that would permit the entry of a ball no more than thirty-eight millimetres in diameter;

(b) shall extend the full width of the opening and from 50 millimetres or less from the floor of the cage or car to a height of at least 1.8 metres; and

(c) shall not open outward. O. Reg. 213/91, s. 302 (2); O. Reg. 142/17, s. 34.

(3) A protective cover referred to in clause (1) (e) shall have a trap door for emergency access which measures not less than 600 millimetres by 600 millimetres. O. Reg. 213/91, s. 302 (3).

303. (1) Subject to subsection (2), a bucket or similar conveyance shall not be used to transport a worker in a shaft. O. Reg. 213/91, s. 303 (1).

(2) A bucket or similar conveyance may be used to transport a worker in a shaft for the purpose of inspecting the hoistway if no other method of access to the parts of the hoistway is available. O. Reg. 213/91, s. 303 (2).

(3) A bucket referred to in subsection (2),

(a) shall be at least 1.2 metres deep;

(b) shall have smoothly-contoured outer surfaces to prevent it from tipping or becoming snagged by an obstacle during hoisting or lowering; and

(c) shall not be self-opening. O. Reg. 213/91, s. 303 (3).

(4) If a pivoted bucket that is manually-dumped and is not self-guided is being used to transport a worker, the bucket,

(a) shall be equipped with a lock to prevent tipping; and

(b) shall be pivoted in such a way that it does not automatically invert when the lock is released. O. Reg. 213/91, s. 303 (4).

(5) A bucket that is not controlled by a cross head running in vertical guides shall not be hoisted or lowered at a speed greater than 0.5 metres per second when it is transporting a worker. O. Reg. 213/91, s. 303 (5).

304. (1) A hinged door that opens upward shall be provided over the opening at the top of a shaft. O. Reg. 213/91, s. 304 (1).

(2) The door shall be closed while a worker is entering or leaving a

bucket over the opening at the top of the shaft. O. Reg. 213/91, s. 304 (2).

305. A skip shall not be used to transport a worker unless,

- (a) the worker is inspecting guiderails or shaft supports; and
- (b) the skip is protected by an overwind device to prevent the skip from being hoisted to the dump position. O. Reg. 213/91, s. 305.

TUNNELS

306. (1) A tunnel shall have enough clear space for the passage of vehicles and the movement of workers. O. Reg. 213/91, s. 306 (1).

(2) The diameter of a circular or elliptical tunnel and the width and height of a square or rectangular tunnel shall be at least 760 millimetres. O. Reg. 213/91, s. 306 (2).

(3) A clear space of at least 450 millimetres shall be left between the side of a tunnel and the nearer side of,

- (a) all trackless haulage equipment being used; and
- (b) all locomotives, haulage cars and machines operating on a track. O. Reg. 213/91, s. 306 (3).

(4) A circular or elliptical tunnel shall have safety platforms at sixty metre intervals along it. O. Reg. 213/91, s. 306 (4).

(5) A safety platform shall be long enough for a crew of workers to stand on, shall be constructed above the tunnel invert and shall be clear of passing equipment. O. Reg. 213/91, s. 306 (5).

307. (1) Except for a tunnel cut in sound rock, the sides and roof of a tunnel shall be supported by timbers set on ribs or beams or by an equivalent system of lining. O. Reg. 213/91, s. 307 (1).

(2) If a tunnel is to be cut in sound rock, the constructor shall obtain a written opinion from an engineer as to whether the sides and roof of the tunnel need to be supported by rock bolts or wire mesh to prevent the spalling of loose rock. O. Reg. 213/91, s. 307 (2).

(3) The sides and roof of a tunnel cut in sound rock,

- (a) shall be supported, where necessary in the opinion of the engineer, by rock bolts or wire mesh;
- (b) shall be inspected daily by a competent worker; and
- (c) shall have all loose pieces of rock removed. O. Reg. 213/91, s. 307 (3).

(4) If the permanent lining of a tunnel will, when completed, consist of a primary lining and a secondary lining, the primary lining shall be strong enough to support the sides and roof of the tunnel until the secondary lining is installed. O. Reg. 213/91, s. 307 (4).

(5) If the permanent lining of a tunnel consists only of a concrete cast-in-place lining, the tunnel shall not be excavated beyond the leading edge of the permanent lining unless adequate temporary shoring is installed as soon as is practicable. O. Reg. 213/91, s. 307 (5).

(6) The primary supports of a tunnel,

(a) shall be designed by an engineer in accordance with good engineering practice to withstand all loads likely to be applied to them; and

(b) shall be constructed in accordance with the design. O. Reg. 213/91, s. 307 (6).

(7) The constructor shall keep available for inspection at a project the design drawings for the primary supports. O. Reg. 213/91, s. 307 (7); O. Reg. 85/04, s. 23.

308. A tunnel shall be kept reasonably free of water when a worker is required to be in the tunnel. O. Reg. 213/91, s. 308.

TUNNEL EQUIPMENT

309. When a haulage locomotive, trackless haulage equipment or a hoist in a shaft or tunnel is left unattended,

(a) its controls shall be left in the neutral position; and

(b) its brakes shall be set or other measures, such as blocking, shall be taken to prevent its moving. O. Reg. 213/91, s. 309.

310. (1) A haulage locomotive shall have suitable brakes, an audible bell and controls that can be operated only by a worker at the driver's station. O. Reg. 213/91, s. 310 (1).

(2) A haulage locomotive shall be designed so that power for its driving mechanism is cut off unless the control regulating the power is continuously operated by a worker at the driver's station. O. Reg. 213/91, s. 310 (2).

(3) The driver of a haulage locomotive shall sound the bell when the locomotive is set in motion or is approaching someone. O. Reg. 213/91, s. 310 (3).

(4) No person other than the driver shall ride on a haulage locomotive.

O. Reg. 213/91, s. 310 (4).

311. No worker shall ride on a haulage train except in a car provided to carry passengers. O. Reg. 213/91, s. 311.

312. A haulage car shall have a device to prevent uncontrolled travel by the car. O. Reg. 213/91, s. 312.

313. (1) Track for haulage equipment shall be securely fastened to the ties on which it is laid. O. Reg. 213/91, s. 313 (1).

(2) If the ties interfere with the use of the bottom of the tunnel as a walkway, a solid walkway that is at least 300 millimetres wide shall be provided. O. Reg. 213/91, s. 313 (2).

314. (1) The air inlet to an air compressor shall be located in such a position that fumes or noxious contaminants are not drawn in with the air to be compressed. O. Reg. 213/91, s. 314 (1).

(2) A valve connected to a vessel used for storing compressed air,

(a) shall be connected at the lowest point of the vessel to permit the discharge of the compressed air; and

(b) shall be opened at least once each shift for the purpose of ejecting oil, water and other matter from the vessel. O. Reg. 213/91, s. 314 (2).

315. (1) A project shall have pumping equipment of sufficient capacity to handle the pumping requirements of the project. O. Reg. 213/91, s. 315 (1).

(2) Pumping equipment shall be connected to an adequate source of energy. O. Reg. 213/91, s. 315 (2).

(3) Sufficient spare pumping equipment and an alternative source of energy for it shall be readily available at the project in case of emergency. O. Reg. 213/91, s. 315 (3).

316.]No internal combustion engine shall be used in a tunnel on a project without the prior written consent of a Director. O. Reg. 213/91, s. 316; O. Reg. 145/00, s. 36.

EXPLOSIVES

317. Before blasting begins in a shaft, tunnel, caisson or cofferdam that is located within the greater of 4.5 metres and twice the length of the longest drill rod used away from another shaft, tunnel, caisson or cofferdam, the worker in charge of the blasting operations shall determine whether work in the adjacent shaft, tunnel, caisson or cofferdam can safely continue during blasting operations. O. Reg. 213/91, s. 317.

318. (1) No vehicle or conveyance being used to transport explosives or blasting agents shall carry any other cargo or any person other than the vehicle operator. O. Reg. 213/91, s. 318 (1).

(2) No detonator shall be transported in a vehicle or conveyance while it is carrying explosives or blasting agents. O. Reg. 213/91, s. 318 (2); O. Reg. 142/17, s. 35.

(3) Where mechanical track haulage is used in a tunnel, explosives or blasting agents shall not be transported on the locomotive or in the same car as the detonators. O. Reg. 213/91, s. 318 (3).

319. (1) A vehicle or conveyance, including trackless equipment, that is transporting explosives or blasting agents in a tunnel by mechanical haulage,

- (a) shall be given an uninterrupted and a clear passage of travel;
 - (b) shall be conspicuously marked by signs or red flags that are easily visible from the front and the rear;
 - (c) shall not travel at a speed greater than six kilometres per hour; and
 - (d) shall not be left unattended. O. Reg. 213/91, s. 319 (1).
- (2) Explosives and blasting agents referred to in subsection (1),
- (a) shall be in a box made of wood or be separated from every metal part of the vehicle or conveyance in which they are being transported by a lining made of wood; and
 - (b) shall be arranged or secured so as to prevent any part of an explosive or blasting agent from being dislodged. O. Reg. 213/91, s. 319 (2).

320. If explosives or blasting agents are to be transported in a shaft, the worker in charge of blasting operations shall notify the hoist operator and shaft attendants before the explosives or blasting agents are put in the conveyance. O. Reg. 213/91, s. 320.

321. A flashlight shall be provided to every worker who is engaged in blasting operations in a tunnel or is in an area from which the means of egress passes a place where blasting is to be done. O. Reg. 213/91, s. 321.

322. Drilling or charging operations in a shaft or tunnel shall not be done simultaneously,

- (a) above or below one another on the same face; or
- (b) 7.5 metres or less, measured horizontally, from one another. O. Reg. 213/91, s. 322; O. Reg. 142/17, s. 36.

323. (1) Explosives and blasting agents shall be fired electrically. O. Reg. 213/91, s. 323 (1).

(2) Despite subsection (1), tape fuse may be used to fire explosives and blasting agents if block holing is to be done. O. Reg. 213/91, s. 323 (2).

324. (1) If a portable direct current battery or a blasting machine is the source of current for blasting, the firing cables or wires,

(a) shall not be connected to the source of current until immediately before the charges are fired; and

(b) shall be disconnected immediately after the charges are fired. O. Reg. 213/91, s. 324 (1).

(2) All firing cables or wires leading to a face shall be short-circuited while the leads from the blasting caps are being connected to one another and to the firing cables. O. Reg. 213/91, s. 324 (2).

(3) No short-circuit of a firing cable or wire shall be removed until all workers have retreated from the face and are so located that, should a premature explosion occur, the workers are not endangered. O. Reg. 213/91, s. 324 (3).

(4) A short-circuit shall be replaced immediately after the firing cables or wires are disconnected from the blasting machine or the blasting switch is opened. O. Reg. 213/91, s. 324 (4).

(5) Separate firing cables or wires for firing charges shall be used for each work location. O. Reg. 213/91, s. 324 (5).

(6) Firing cables or wires,

(a) shall be located as far as is practicable from every other electrical circuit; and

(b) shall not be permitted to come in contact with power, lighting or communication cables, or pipes, rails or other continuous metal grounded surfaces. O. Reg. 213/91, s. 324 (6).

325. (1) Every device, other than a portable hand-operated device, used for firing a charge shall meet the requirements of this section. O. Reg. 213/91, s. 325 (1).

(2) No person other than a competent worker shall use a device used for firing a charge. O. Reg. 213/91, s. 325 (2).

(3) A device used for firing a charge shall have a switch mechanism that automatically returns by gravity to the open position. O. Reg. 213/91, s. 325 (3).

(4) The live side of a device used for firing a charge shall be installed in a fixed locked box which is accessible only to the worker doing the blasting. O. Reg. 213/91, s. 325 (4).

(5) The lock on the box referred to in subsection (4) shall be able to be closed only when the contacts of the device are open and a short-circuiting device is in place. O. Reg. 213/91, s. 325 (5).

(6) The leads to the face shall be short-circuited when the contacts of the device are in the open position. O. Reg. 213/91, s. 325 (6).

326. (1) A circuit used for blasting shall originate from an isolated ungrounded power source and shall be used only for blasting. O. Reg. 213/91, s. 326 (1).

(2) Subsection (1) does not apply with respect to blasting done with a portable hand-operated device. O. Reg. 213/91, s. 326 (2).

327. (1) When a charge is fired and after a shot is heard, every worker in a place of refuge from a blast shall remain there and not return to the blast area for at least ten minutes. O. Reg. 213/91, s. 327 (1).

(2) If a charge is fired and no shot is heard, before the circuit is repaired,

(a) the blasting circuit shall be locked in the open position; and

(b) the lead wires shall be short-circuited. O. Reg. 213/91, s. 327 (2).

(3) A worker who suspects a misfire of an explosive or a blasting agent shall report it to the supervisor in charge of the project. O. Reg. 213/91, s. 327 (3).

(4) A charge of an explosive or a blasting agent that has misfired shall be left in place and blasted as soon as it is discovered. O. Reg. 213/91, s. 327 (4).

328. When a blasting operation is completed, the blasting switch shall be locked in the open position, the lead wires short-circuited and the blasting box locked. O. Reg. 213/91, s. 328.

VENTILATION

329. An adequate supply of fresh air shall be provided and circulated throughout an underground work place. O. Reg. 213/91, s. 329.

330. (1) An underground work place shall be tested regularly for noxious or toxic gases, fumes or dust. O. Reg. 213/91, s. 330 (1).

(2) A competent worker shall regularly test the air and the mechanical ventilation for an underground work place to ensure that the mechanical ventilation is adequate. O. Reg. 213/91, s. 330 (2).

(3) When the results of the tests referred to in subsection (2) indicate there is a need for respiratory protective equipment, the employer shall provide respiratory protective equipment. O. Reg. 213/91, s. 330 (3).

331. (1) Mechanical ventilation shall be provided in a shaft in which an internal combustion engine or other device which emits a noxious gas or fume operates. O. Reg. 213/91, s. 331 (1).

(2) Subsection (1) does not apply if the noxious gas or fume is discharged outside the shaft in such a way that its return to the shaft is prevented. O. Reg. 213/91, s. 331 (2).

PART V

WORK IN COMPRESSED AIR

INTERPRETATION AND APPLICATION

332. In this Part,

“air lock” means a chamber designed for the passage of persons or materials from one place to another place that has a different air pressure from the first; (“sas”)

“compressed air” means air whose pressure is mechanically raised to more than atmospheric pressure; (“air comprimé”)

“decompression sickness”, in relation to a worker, means a condition of bodily malfunction caused by a change from a higher to a lower air pressure and includes the condition commonly known as “the bends”; (“mal de décompression”)

“kilopascals”, except in section 376, means kilopascals relative to atmospheric pressure; (“kilopascals”)

“maximum air pressure”, in relation to a worker, means the greatest level of air pressure to which a worker is subjected for a period of more than five minutes; (“pression d’air maximale”)

“medical lock” means a chamber in which workers may be subjected to changes in air pressure for medical purposes; (“caisson de décompression”)

“superintendent” means the person appointed by a constructor to be supervisor over and in charge of work done in compressed air; (“surintendant”)

“work chamber” means a part of a project that is used for work in compressed air but does not include an air lock or a medical lock. (“chambre de travail”) O. Reg. 213/91, s. 332.

333. This Part applies with respect to work done in compressed air, other than work done in diving bells or work done by divers. O. Reg. 213/91, s. 333.

GENERAL REQUIREMENTS

334. (1) No constructor or employer shall begin work at a project where a worker may be subjected to compressed air until the requirements of this section are met. O. Reg. 213/91, s. 334 (1).

(2) The employer of workers who may be subjected to compressed air at a project shall give a Director written notice of the intended use of compressed air on the project at least fourteen days before beginning work on the project. O. Reg. 213/91, s. 334 (2); O. Reg. 145/00, s. 37 (1).

(3) Before work is begun in compressed air, the employer shall obtain written permission from a Director. O. Reg. 213/91, s. 334 (3); O. Reg. 145/00, s. 37 (2).

335. (1) Before work is begun in compressed air at a project, a constructor shall give written notice,

(a) to the local police department and the fire department and public hospital nearest to the project; and

(b) to a Director, together with the names and addresses of those to whom notice is given under clause (a). O. Reg. 213/91, s. 335 (1); O. Reg. 145/00, s. 38.

(2) A notice shall set out,

(a) the location of the project;

(b) the name, address and telephone number of the project physician and the superintendent; and

(c) the location of a medical lock for the project and of every other readily-available medical lock. O. Reg. 213/91, s. 335 (2).

(3) The employer shall give notice of the completion of work in compressed air at the project to those who were given notice under clause (1) (a). O. Reg. 213/91, s. 335 (3).

336. (1) The employer shall appoint a competent person as superintendent of all work in compressed air at a project. O. Reg. 213/91, s. 336 (1).

(2) The superintendent, before a worker is first subjected to compressed air,

(a) shall ensure that the worker is fully instructed,

- (i) in the hazards of working in compressed air, and
 - (ii) in the measures to be taken to safeguard the health and safety of the worker and other workers on the project; and
- (b) shall obtain an acknowledgement signed by the worker who is receiving the instruction stating that the worker has been so instructed. O. Reg. 213/91, s. 336 (2).

337. (1) A superintendent at a project shall designate for each shift at least one competent worker as lock tender who shall attend to the controls of an air lock. O. Reg. 213/91, s. 337 (1).

(2) A lock tender must be able to speak, read and write English competently. O. Reg. 213/91, s. 337 (2).

(3) A superintendent at a project shall ensure that at least one competent worker in addition to the lock tender is available in an emergency to perform the duties of the lock tender while a worker is working in compressed air. O. Reg. 213/91, s. 337 (3).

338. (1) The superintendent shall keep available at a project for inspection by an inspector,

- (a) a copy of each form described in clause 352 (1) (b) prepared by the project physician;
- (b) all records required under section 373 of air pressure in air locks on the project; and
- (c) all records required under section 394 to be kept by a lock tender. O. Reg. 213/91, s. 338 (1); O. Reg. 64/18, s. 2 (1).

(2) When work in compressed air at the project is finished, the superintendent shall promptly send to a Director a copy of each form described in clause 352 (1) (b) prepared by the project physician. O. Reg. 64/18, s. 2 (2).

339. (1) A worker who works in compressed air shall wear for at least twenty-four hours after working in compressed air a sturdy metal or plastic badge that meets the requirements of subsection (2). O. Reg. 213/91, s. 339 (1).

(2) A badge shall measure at least fifty millimetres in diameter and shall set out,

- (a) the name of the constructor of the project;
- (b) the name and telephone number of the project physician;
- (c) the location of a medical lock at the project; and

- (d) the words, “compressed air worker – in case of decompression sickness take immediately to a medical lock”. O. Reg. 213/91, s. 339 (2).

(3) The constructor at a project shall provide workers with the badge required under subsection (1). O. Reg. 213/91, s. 339 (3).

COMMUNICATIONS

340. (1) A telephone system for work in compressed air shall be provided at a project. O. Reg. 213/91, s. 340 (1).

- (2) A telephone system shall consist of telephones located,
- (a) at a location as close as is practicable to the work face;
 - (b) in every work chamber near a door that leads to an air lock;
 - (c) in every air lock;
 - (d) near every lock tender’s work position;
 - (e) adjacent to every compressor plant; and
 - (f) in the superintendent’s office. O. Reg. 213/91, s. 340 (2).

341. (1) An electric buzzer or bell system for work in compressed air shall be provided at a project. O. Reg. 213/91, s. 341 (1).

(2) An electric buzzer or bell system shall consist of a switch and a buzzer or bell located,

- (a) in every work chamber near a door that leads to an air lock;
- (b) in every air lock; and
- (c) near every lock tender’s work position. O. Reg. 213/91, s. 341 (2).

(3) A signal set out in Column 1 of the Table shall be used to communicate the meaning set out opposite to it in Column 2 between a work chamber, an air lock and the lock tender’s work position.

TABLE

Item	Column 1 Code of signals	Column 2 Meaning
1.	1 signal	When no people are in the air lock, MATERIAL IS COMING OUT.
2.	2 signals	When people are in the air lock, STOP COMPRESSING.
3.	3 signals	PEOPLE ARE COMING OUT OF THE AIR LOCK.

(4) A copy of the signal code shall be posted near every switch of an electric buzzer or bell system. O. Reg. 213/91, s. 341 (4).

(5) A lock tender shall acknowledge every signal received on an electric buzzer or bell system by returning the same signal. O. Reg. 213/91, s. 341 (5).

FIRE PREVENTION

342. (1) No person shall use acetylene while working in compressed air. O. Reg. 213/91, s. 342 (1).

(2) No person shall smoke or be permitted to smoke in an air lock or work chamber, other than in an area designated as a smoking area by the superintendent. O. Reg. 213/91, s. 342 (2).

343. Before a flame-cutting, gas-welding or similar source of ignition is introduced into a work chamber that is in the vicinity of a combustible material,

- (a) a firewatch shall be established and maintained;
- (b) a fire hose shall be prepared for use;
- (c) the fire hose shall be tested to ensure there is an adequate supply of water and water pressure to extinguish a fire; and
- (d) a fire extinguisher suitable for the hazard shall be provided nearby. O. Reg. 213/91, s. 343.

344. As far as practicable, no combustible material shall be installed in or stored in an air lock or work chamber. O. Reg. 213/91, s. 344.

345. (1) A standpipe connected to a source of water or connected to other pipes above ground shall be installed in every air lock and work chamber at a project. O. Reg. 213/91, s. 345 (1).

- (2) A standpipe shall have,
 - (a) valves that isolate the standpipe from the rest of the fire prevention system;
 - (b) a fitting that is controlled by a valve installed on the standpipe on the work chamber side of the bulkhead and by a valve inside the material lock;
 - (c) a fitting and valve similar to that described in clause (b) installed at the end of the standpipe nearest to the work face; and
 - (d) the location of the fittings and valves clearly marked. O. Reg. 213/91, s. 345 (2).

(3) A fitting described in clause (2) (b) shall be such that a fire hose of the local fire department can be connected to it. O. Reg. 213/91, s. 345 (3).

LIGHTING AND ELECTRICAL SUPPLY

346. Electrical wiring passing through an air lock or the bulkheads adjacent to an air lock, other than telephone and signal system wiring, shall be installed in a rigid metal conduit. O. Reg. 213/91, s. 346.

347. (1) A lighting system shall be provided in each work chamber. O. Reg. 213/91, s. 347 (1).

(2) Electric light bulbs used in an air lock shall be enclosed in a glass and metal protective screen cover. O. Reg. 213/91, s. 347 (2).

(3) Flashlights shall be readily available at the entrance to an air lock, on the atmospheric side in an air lock and at every telephone required by section 340. O. Reg. 213/91, s. 347 (3).

348. An auxiliary source of supply of electricity that is not a portable emergency source of supply shall be provided for the lighting system. O. Reg. 213/91, s. 348.

349. (1) An emergency electrical lighting system shall be provided and maintained in each air lock and work chamber. O. Reg. 213/91, s. 349 (1); O. Reg. 142/17, s. 37.

(2) An emergency electrical lighting system,

(a) shall be connected to the electrical supply so that it automatically turns on in the event of the failure of the electrical supply; and

(b) shall have a testing switch, if the system is battery-powered. O. Reg. 213/91, s. 349 (2).

(3) An emergency electrical lighting system shall be tested at intervals that are at least as frequent as recommended by the manufacturer and that are adequate to ensure that it will function in an emergency. O. Reg. 213/91, s. 349 (3).

SANITATION

350. A work chamber shall be provided with a reasonable supply of drinking water and at least one chemical toilet. O. Reg. 213/91, s. 350.

MEDICAL REQUIREMENTS

351. (1) An employer who is constructing a tunnel or caisson in which a worker works or will work in compressed air shall employ as project physician at least one legally qualified medical practitioner. O. Reg.

213/91, s. 351 (1).

(2) The project physician shall conduct such medical examinations of workers as in his or her opinion are necessary and shall establish a medical treatment program for the workers. O. Reg. 213/91, s. 351 (2).

(3) A project physician shall be reasonably available to render medical treatment or advice on the treatment of decompression sickness while a worker is working in compressed air. O. Reg. 213/91, s. 351 (3).

(4) The employer shall ensure that the project physician instruct workers on the hazards of working in compressed air and the necessary precautions to be taken to avoid decompression sickness. O. Reg. 213/91, s. 351 (4).

(5) If the pressure in a work chamber at a project may exceed 350 kilopascals for a period of more than five minutes, a project physician shall establish procedures to control decompression sickness including,

- (a) the maximum length of work periods for the workers in the chamber;
- (b) the minimum length of rest periods for workers in the chamber; and
- (c) compression and decompression procedures. O. Reg. 213/91, s. 351 (5).

352. (1) No worker shall work or be permitted to work in compressed air on a project unless,

- (a) the project physician has complied with subsection (4); and
- (b) the project physician indicates that the worker is physically fit to work in compressed air on the form entitled "Record of Compressed Air Worker", which is Figure 1 in the CSA Standard Z275.3-09 (R2014): Occupational Safety Code for Work in Compressed Air Environments. O. Reg. 213/91, s. 352 (1); O. Reg. 64/18, s. 3 (1).

(2) Subsection (1) does not apply with respect to an inspector or with respect to a worker accompanying an inspector at the inspector's request. O. Reg. 213/91, s. 352 (2).

(3) Every worker working in compressed air at a project shall have a medical examination performed by the project physician before beginning work in compressed air and every two months thereafter while the worker is working in compressed air to determine the worker's fitness for working in compressed air. O. Reg. 213/91, s. 352 (3).

(4) The project physician shall complete the form described in clause

(1) (b) for the worker, stating whether the worker is physically fit to work in compressed air and ensure that the superintendent receives a copy. O. Reg. 213/91, s. 352 (4); O. Reg. 64/18, s. 3 (2).

(5) The medical examination shall include,

(a) a physical examination;

(b) a test under compressed air, if the worker has not previously worked in compressed air; and

(c) such clinical tests as the project physician may require. O. Reg. 213/91, s. 352 (5).

(6) The clinical tests referred to in clause (5) (c) shall include x-rays of the chest and shoulders, and hip and knee joints taken at least once every five years. O. Reg. 213/91, s. 352 (6).

(7) If a worker undergoes a medical examination, the employer shall pay,

(a) the worker's costs for any medical examinations and tests; and

(b) the worker's reasonable travel costs respecting any medical examinations and tests. O. Reg. 213/91, s. 352 (7).

(8) The time the worker spends to undergo medical examinations and tests, including travel time, shall be deemed to be work time for which the worker shall be paid by the employer at the worker's regular or premium rate, as may be proper. O. Reg. 213/91, s. 352 (8).

(9) The project physician conducting the physical examination or clinical tests or under whose supervision the examination or tests are made shall advise the employer whether the worker is fit or is fit with limitations or unfit for work in compressed air, without giving or disclosing to the employer the records or results of the examination or tests. O. Reg. 213/91, s. 352 (9).

(10) The employer shall act on the advice given by the physician under subsection (9). O. Reg. 213/91, s. 352 (10).

(11) Where a project physician advises the employer that a worker, because of a condition resulting from work in compressed air, is fit with limitations or is unfit, the project physician shall forthwith communicate such advice to the Chief Physician of the Ministry. O. Reg. 213/91, s. 352 (11); O. Reg. 142/17, s. 38 (1).

(12) The records of medical examinations, tests, medical treatment and worker exposure to compressed air made or obtained by the project physician under section 351 and this section shall be kept in a secure

place by the project physician who has conducted the examinations and tests or under whose supervision the examinations and tests have been made, for at least six years. O. Reg. 213/91, s. 352 (12); O. Reg. 142/17, s. 38 (2).

(13) After six years, the project physician may forward the records to the Chief Physician of the Ministry, or a physician designated by the Chief Physician, and, in any event, the records shall not be destroyed for a period the greater of forty years from the time such records were first made or twenty years from the time the last of such records were made. O. Reg. 213/91, s. 352 (13); O. Reg. 142/17, s. 38 (3).

353. (1) A worker who is about to work in compressed air and who does not feel well for any reason shall report the fact as soon as is practicable to the superintendent or a project physician before working in compressed air. O. Reg. 213/91, s. 353 (1).

(2) A worker who is working in compressed air and who does not feel well for any reason shall report the fact as soon as practicable to the superintendent or a project physician. O. Reg. 213/91, s. 353 (2).

354. A worker who is absent for a period of ten or more days from working in compressed air shall not resume work in compressed air until a project physician indicates on the form described in clause 352 (1) (b) that the worker is physically fit to resume work in compressed air. O. Reg. 213/91, s. 354; O. Reg. 64/18, s. 4.

MEDICAL LOCKS

355. (1) A first aid room shall be provided in close proximity to each medical lock at a project. O. Reg. 213/91, s. 355 (1).

(2) A first aid room shall contain all equipment necessary for first aid for workers working in compressed air and facilities adequate for conducting medical examinations. O. Reg. 213/91, s. 355 (2).

356. (1) A constructor shall supply at least one medical lock at a project where work in compressed air is done and shall maintain it ready for operation while work in compressed air is being done. O. Reg. 213/91, s. 356 (1).

(2) A certificate of inspection issued under Ontario Regulation 220/01 (Boilers and Pressure Vessels) made under the Technical Standards and Safety Act, 2000 for a working pressure of at least 520 kilopascals is required for every medical lock on a project. O. Reg. 213/91, s. 356 (2); O. Reg. 142/17, s. 39.

357. (1) A medical lock shall be not less than 1.8 metres high at its centre line. O. Reg. 213/91, s. 357 (1).

(2) A medical lock shall be divided into two pressure compartments. O. Reg. 213/91, s. 357 (2).

(3) Each compartment of a medical lock shall have air valves that are arranged so that the compartment can be pressurized and depressurized from inside and outside the lock. O. Reg. 213/91, s. 357 (3).

(4) An observation window shall be installed in each door and in the rear wall of a medical lock. O. Reg. 213/91, s. 357 (4).

(5) A medical lock shall be equipped with,

(a) a pressure release valve which will automatically blow-off at a pressure not greater than seventy kilopascals more than the operating pressure of the work chamber;

(b) a pressure gauge, a thermometer, a telephone, a cot, seating and a radiant heater; and

(c) a cot mattress, mattress cover and blankets all of which are made of material that is not readily flammable. O. Reg. 213/91, s. 357 (5).

(6) The pressure release valve shall be tested and calibrated before the medical lock is used. O. Reg. 213/91, s. 357 (6).

(7) A medical lock shall be maintained at a temperature of at least 18 degrees celsius, well-lit and well-ventilated and kept clean and sanitary. O. Reg. 213/91, s. 357 (7).

358. (1) A project physician shall control the medical treatment of workers in a medical lock at a project. O. Reg. 213/91, s. 358 (1).

(2) While a worker is working in compressed air and for twenty-four hours afterwards, at least one worker experienced in the decompression of persons suffering from decompression sickness,

(a) shall be present on the project, if the work in compressed air was done at a pressure greater than 100 kilopascals; or

(b) shall be readily available, if the work in compressed air was done at a pressure of 100 kilopascals or less. O. Reg. 213/91, s. 358 (2).

AIR COMPRESSORS

359. (1) The superintendent shall designate at least one competent worker to be in charge of the compressors compressing air for a work chamber and air lock. O. Reg. 213/91, s. 359 (1).

(2) REVOKED: O. Reg. 88/13, s. 3.

(3) A competent worker designated under subsection (1) shall attend

to the compressors,

- (a) while a person is in compressed air in the work chamber or air lock; and
 - (b) for twenty-four hours after a person has been in compressed air with a pressure exceeding 100 kilopascals in the work chamber or air lock. O. Reg. 213/91, s. 359 (3).
- (4) REVOKED: O. Reg. 88/13, s. 3.

360. (1) At least two air compressors shall be provided for every work chamber and air lock at a project. O. Reg. 213/91, s. 360 (1).

(2) The air compressors for a work chamber or an air lock shall have capacity enough to ensure that, if one compressor is not operating, the remaining compressors are capable of supplying the air required for the work chamber or air lock. O. Reg. 213/91, s. 360 (2).

361. (1) The energy required to furnish compressed air to a work chamber or an air lock shall be readily available at a project from at least two independent sources. O. Reg. 213/91, s. 361 (1).

(2) The two sources of energy shall be arranged so that, should the principal energy source fail, an auxiliary source automatically energizes the compressor. O. Reg. 213/91, s. 361 (2).

(3) An auxiliary source of energy shall be inspected and tested by being operated at regular intervals of not more than seven days to ensure that it works. O. Reg. 213/91, s. 361 (3).

362. (1) A compressor for a work chamber or an air lock shall be constructed so as to ensure that lubricating oil is not discharged with the air that the compressor supplies. O. Reg. 213/91, s. 362 (1).

(2) The air intake for a compressor shall be located so as to prevent the entry of exhaust gases from internal combustion engines or other contaminants. O. Reg. 213/91, s. 362 (2).

363. Air supplied for use in a work chamber or an air lock,

- (a) shall be clean and free from excessive moisture, oil or other contaminants; and
- (b) shall be kept between 10 degrees and 27 degrees celsius, as far as is practicable. O. Reg. 213/91, s. 363.

AIR LOCKS AND WORK CHAMBERS

364. One air lock shall be provided for each work chamber at a project. O. Reg. 213/91, s. 364.

365. (1) An air lock, including the bulkheads and doors, shall be designed by an engineer in accordance with good engineering practice to withstand the pressures to be used in the work chamber and in the air lock. O. Reg. 213/91, s. 365 (1).

(2) An air lock shall be constructed in accordance with the engineer's design drawings for it. O. Reg. 213/91, s. 365 (2).

(3) An air lock used for people,

(a) shall measure at least two metres laterally and vertically;

(b) shall be large enough to accommodate the maximum number of people expected to be in the work chamber without them being in cramped positions;

(c) other than an ancillary air lock that complies with section 367, shall contain a functional and accurate electric time piece, thermometer and pressure gauge. O. Reg. 213/91, s. 365 (3).

(4) The constructor shall send to a Director before construction of an air lock begins a copy of the design drawings for the air lock. O. Reg. 213/91, s. 365 (4); O. Reg. 145/00, s. 40; O. Reg. 85/04, s. 24.

(5) The constructor shall keep at a project a copy of the design drawings for an air lock while the air lock is at the project. O. Reg. 213/91, s. 365 (5).

366. Separate air locks shall be used for people and for materials,

(a) if the air lock is in a shaft; or

(b) where practicable, if the air locks are installed in a tunnel and if the air pressure is likely to exceed 100 kilopascals. O. Reg. 213/91, s. 366.

367. (1) Every air lock shall have an ancillary air lock that,

(a) can be pressurized independently of the primary air lock;

(b) has a door into the primary air lock or into the work chamber; and

(c) has a door into air at atmospheric pressure. O. Reg. 213/91, s. 367 (1).

(2) Except in an emergency, a door in an ancillary air lock into air at atmospheric pressure shall be kept open. O. Reg. 213/91, s. 367 (2).

(3) A vertical air lock in a shaft or pneumatic caisson shall not be used to decompress workers unless a separate worker-lock with its own controls for compression and decompression is provided. O. Reg. 213/91, s. 367 (3).

(4) An ancillary air lock shall be used to enter the work chamber only,

(a) when the door between the chamber and the primary air lock is open; and

(b) when it is impossible or impracticable for the door to be closed. O. Reg. 213/91, s. 367 (4).

(5) Except in an emergency, an ancillary air lock shall not be used to decompress people. O. Reg. 213/91, s. 367 (5).

368. (1) At least two pipes shall supply air to each work chamber and each air lock. O. Reg. 213/91, s. 368 (1).

(2) Each of the pipes shall have a valve installed in the vicinity of the compressors to enable one pipe to be disconnected while another pipe remains in service at the work chamber or air lock. O. Reg. 213/91, s. 368 (2).

(3) The outlet end of a pipe supplying air to a work chamber or an air lock shall have a hinged flap valve. O. Reg. 213/91, s. 368 (3).

369. (1) Each work chamber and each air lock, including an ancillary air lock, shall have a means of controlling and of automatically limiting the maximum air pressure in it. O. Reg. 213/91, s. 369 (1).

(2) The air pressure control mechanism shall be set at a level not greater than,

(a) for an air lock, the pressure for which the air lock, bulkheads and doors are designed; and

(b) for a work chamber, seventy kilopascals more than the maximum air pressure to be used in the chamber. O. Reg. 213/91, s. 369 (2).

370. At each set of valves controlling the air supply to and discharge from an air lock, there shall be,

(a) a pressure gauge showing the air pressure in the air lock;

(b) a pressure gauge showing the air pressure in the work chamber;

(c) an electric time piece;

(d) a thermometer showing the temperature in the air lock; and

(e) a legible copy of the procedures governing maximum work periods and minimum decompression times for the air lock. O. Reg. 213/91, s. 370.

371. (1) Separate valves controlling the air supply to and discharge from an air lock shall be provided inside and outside the lock. O. Reg.

213/91, s. 371 (1).

(2) The valves shall be arranged so that a person can enter or leave the air lock or work chamber if no lock tender is attending the air lock. O. Reg. 213/91, s. 371 (2).

372. If an automatic compression and decompression device is installed in an air lock used for people, the air lock shall have a manual means of controlling the air pressure in the lock. O. Reg. 213/91, s. 372.

373. (1) An air lock, other than an ancillary air lock, used for people shall have an automatic recording gauge to permanently record the air pressure in the lock. O. Reg. 213/91, s. 373 (1).

(2) The gauge shall be a rotating dial or strip-chart rectilinear type. O. Reg. 213/91, s. 373 (2).

(3) The gauge,

(a) shall be installed so that the lock tender cannot see it when at the controls of the air lock;

(b) shall indicate the change in air pressure at intervals of not more than five minutes; and

(c) shall be kept locked except when the recording paper is being changed. O. Reg. 213/91, s. 373 (3).

(4) Despite subsection (2) and clause (3) (b), the gauge for an air lock at a work chamber whose air pressure exceeds 100 kilopascals shall be the strip-chart rectilinear type and shall indicate the change in air pressure at intervals of not more than one minute. O. Reg. 213/91, s. 373 (4).

(5) The recording paper used in a gauge shall be changed every seven days and shall be marked to identify the period of time to which it relates. O. Reg. 213/91, s. 373 (5).

374. (1) An air lock shall have a pressure gauge that can be read from the work chamber and that shows the air pressure in the lock. O. Reg. 213/91, s. 374 (1).

(2) A pressure gauge, other than a portable pressure gauge, shall have fittings for attaching test gauges to it and shall be tested daily for accuracy. O. Reg. 213/91, s. 374 (2).

375. A work chamber shall contain, in a protective container less than 15 metres from the work face, a portable pressure gauge and a thermometer. O. Reg. 213/91, s. 375; O. Reg. 142/17, s. 40.

376. (1) Only one unit of measuring pressure (either kilopascals or pounds per square inch) shall be used on a project. O. Reg. 213/91, s. 376

(1).

(2) Pressure gauges for decompression equipment and decompression procedures established for a project shall be calibrated using the unit of pressure for the project. O. Reg. 213/91, s. 376 (2).

377. (1) The door between an air lock and a work chamber shall be kept open,

(a) unless the air lock is being used to compress or decompress people or to move materials; or

(b) when people are in the work chamber. O. Reg. 213/91, s. 377 (1).

(2) Clause (1) (a) does not apply with respect to an ancillary air lock. O. Reg. 213/91, s. 377 (2).

378. Every air lock door shall have a transparent observation window. O. Reg. 213/91, s. 378.

379. If practicable, an air lock used for people, other than an ancillary air lock, shall have one seat for each person being decompressed at one time. O. Reg. 213/91, s. 379.

380. (1) An air lock in which people are decompressed shall have a means of radiant heat if the air pressure in the lock exceeds 100 kilopascals. O. Reg. 213/91, s. 380 (1).

(2) The temperature in an air lock used for people shall not exceed 27 degrees celsius. O. Reg. 213/91, s. 380 (2).

381. (1) A smoke line shall be provided from each work face of a work chamber if an air lock or bulkhead is located between the chamber and the surface. O. Reg. 213/91, s. 381 (1).

(2) Each smoke line shall extend to a point less than 15 metres from a work face. O. Reg. 213/91, s. 381 (2); O. Reg. 142/17, s. 41 (1).

(3) Each smoke line shall have two quick opening valves at least 100 millimetres in diameter,

(a) one located less than 17 metres from the work face; and

(b) one located between the air lock closest to the work chamber and the work chamber and less than two metres from the air lock. O. Reg. 213/91, s. 381 (3); O. Reg. 142/17, s. 41 (2, 3).

(4) Each smoke line shall be at least 100 millimetres in diameter and shall have a readily-accessible outlet above ground,

(a) that has a quick opening valve at least 100 millimetres in diameter;

- (b) that is clearly marked with a sign stating “SMOKE LINE – TO BE USED ONLY IN CASE OF EMERGENCY”; and
- (c) that is sealed to prevent the inadvertent opening of the valve. O. Reg. 213/91, s. 381 (4).

(5) Each smoke line shall extend from inside the work chamber to above ground and shall pass vertically through either the air lock or the bulkhead between the work chamber and air at atmospheric pressure. O. Reg. 213/91, s. 381 (5).

382. (1) No bulkhead in a work chamber shall interfere with the free passage from the work face to an air lock of people in a tunnel or shaft. O. Reg. 213/91, s. 382 (1).

(2) Subsection (1) does not apply with respect to a partial bulkhead in a sub-aqueous tunnel if the bulkhead is designed and placed to trap air so that workers can escape from the tunnel if it is flooded. O. Reg. 213/91, s. 382 (2).

383. (1) Except when it is necessary to protect people during an emergency, the pressure in a work chamber shall not exceed 350 kilopascals for more than five minutes. O. Reg. 213/91, s. 383 (1).

(2) If the pressure in a work chamber exceeds 350 kilopascals for more than five minutes,

- (a) the superintendent shall promptly notify an inspector by telephone, two-way radio or in person; and
- (b) the pressure maintained in the work chamber shall be the least possible pressure required to meet the emergency. O. Reg. 213/91, s. 383 (2).

384. (1) Subject to subsection (2), no worker shall work or be permitted to work in a work chamber in which the temperature exceeds the greater of,

- (a) 27 degrees celsius; and
- (b) the temperature at the entrance to the service shaft above ground. O. Reg. 213/91, s. 384 (1).

(2) No worker shall work or be permitted to work in a work chamber in which the temperature exceeds 38 degrees celsius. O. Reg. 213/91, s. 384 (2).

385. (1) Water on the floor of a work chamber or an air lock shall be drained by a pipe or mop line and, if necessary, a pump. O. Reg. 213/91, s. 385 (1).

(2) A pipe or mop line shall have an inside diameter of at least fifty-one millimetres. O. Reg. 213/91, s. 385 (2).

(3) At least one inlet with a valve to a pipe or mop line for an air lock and work chamber shall be located,

- (a) in the air lock;
 - (b) less than 15 metres from the work face; and
 - (c) at intervals of not more than thirty metres along the length of the work chamber. O. Reg. 213/91, s. 385 (3); O. Reg. 142/17, s. 42.
- (4) An inlet shall be diverted downward. O. Reg. 213/91, s. 385 (4).

(5) An outlet from an air lock shall discharge downward under atmospheric air pressure. O. Reg. 213/91, s. 385 (5).

WORK PERIODS AND REST PERIODS

386. (1) Subject to subsection (2), no worker shall,

- (a) work for more than two working periods in any consecutive twenty-four hour period where the maximum air pressure is not greater than 100 kilopascals; or
- (b) work for more than one working period in any consecutive twenty-four hour period where the maximum air pressure is more than 100 kilopascals. O. Reg. 213/91, s. 386 (1).

(2) No worker shall work or be permitted to work more than eight hours in a period of twenty-four hours. O. Reg. 213/91, s. 386 (2).

(3) No lock tender shall work or be permitted to work more than nine hours in a period of twenty-four hours. O. Reg. 213/91, s. 386 (3).

(4) The period between the end of one work period and the beginning of the next for a worker doing manual work under compressed air where the maximum air pressure exceeds 100 kilopascals shall be at least twelve hours. O. Reg. 213/91, s. 386 (4).

387. (1) A worker who is working in compressed air shall have a rest period of at least,

- (a) $\frac{1}{4}$ hour, if the worker was working in pressure of 100 kilopascals or less;
- (b) $\frac{3}{4}$ hour, if the worker was working in pressure greater than 100 kilopascals up to and including 140 kilopascals;
- (c) $1\frac{1}{2}$ hours, if the worker was working in pressure greater than 140 kilopascals up to and including 220 kilopascals; or

(d) two hours, if the worker was working in pressure greater than 220 kilopascals. O. Reg. 213/91, s. 387 (1).

(2) No worker shall be permitted to perform manual work or engage in physical exertion during a rest period. O. Reg. 213/91, s. 387 (2).

(3) No worker shall be permitted to leave a project during a rest period. O. Reg. 213/91, s. 387 (3).

388. (1) The employer shall provide, free of charge, sugar and hot beverages for workers working in compressed air to consume during their rest periods. O. Reg. 213/91, s. 388 (1).

(2) An employer shall keep containers and cups for beverages in a sanitary condition and shall store them in a closed container. O. Reg. 213/91, s. 388 (2).

LOCK TENDERS

389. (1) A lock tender shall supervise the controls of an air lock when a worker is about to be, or is being, subjected to compressed air in the air lock or work chamber. O. Reg. 213/91, s. 389 (1).

(2) Subject to subsection (3), a lock tender shall tend only one air lock at a time. O. Reg. 213/91, s. 389 (2).

(3) A lock tender may tend two locks if,

(a) they are in close proximity;

(b) the pressure in each work chamber does not exceed 100 kilopascals; and

(c) only one of the locks is being used to compress or decompress a worker. O. Reg. 213/91, s. 389 (3).

390. (1) A lock tender shall ensure that the requirements of this section are met before a worker enters an air lock. O. Reg. 213/91, s. 390 (1).

(2) A worker shall be examined by a project physician before the worker enters an air lock in preparation for working in compressed air. O. Reg. 213/91, s. 390 (2).

(3) A lock tender shall ensure that any worker who enters the air lock in preparation for working in compressed air has been examined by a physician in accordance with subsection (2). O. Reg. 213/91, s. 390 (3).

(4) The means of air supply, air pressure gauges and controls, lock equipment and other devices necessary for the safe operation of an air lock and the protection of workers shall be in working order. O. Reg. 213/91, s. 390 (4).

391. (1) A lock tender shall increase the air pressure on a worker in an air lock in accordance with this section. O. Reg. 213/91, s. 391 (1).

(2) Air pressure shall be increased uniformly and to no more than thirty-five kilopascals in the first two minutes of application of compressed air. O. Reg. 213/91, s. 391 (2).

(3) Air pressure shall not be increased to more than thirty-five kilopascals until the lock tender ensures that every worker in the air lock is free from discomfort due to air pressure. O. Reg. 213/91, s. 391 (3).

(4) Air pressure shall be increased above thirty-five kilopascals at a uniform rate of not greater than thirty-five kilopascals per minute. O. Reg. 213/91, s. 391 (4).

(5) A lock tender shall observe a worker in an air lock while increasing the air pressure on the worker and, if the worker shows signs of discomfort and the discomfort does not quickly disappear, the lock tender shall gradually decrease the air pressure until the worker reports that the discomfort has ceased or until the air pressure reaches atmospheric pressure. O. Reg. 213/91, s. 391 (5).

392. (1) A lock tender shall decrease the air pressure on a worker in an air lock in accordance with this section and section 395. O. Reg. 213/91, s. 392 (1).

(2) Air pressure shall be decreased uniformly in each of the stages of decompression referred to in section 395. O. Reg. 213/91, s. 392 (2).

(3) A lock tender shall constantly observe a worker in an air lock while decreasing the air pressure on the worker and, if the worker shows signs of discomfort and the discomfort does not quickly disappear, the lock tender shall gradually increase the air pressure until the worker reports that the discomfort has ceased or until the air pressure equals the pressure in the work chamber. O. Reg. 213/91, s. 392 (3).

393. (1) If a worker in an air lock appears to be suffering from decompression sickness, a lock tender shall notify, and follow the instructions of, a project physician, the superintendent or a person designated by the superintendent. O. Reg. 213/91, s. 393 (1).

(2) If a worker in an air lock appears to be injured or to be unwell from a cause unrelated to air pressure, a lock tender shall notify, and follow the instructions of, a project physician. O. Reg. 213/91, s. 393 (2).

(3) In the circumstances described in subsection (2), a lock tender shall decompress the worker unless otherwise instructed by the project physician. O. Reg. 213/91, s. 393 (3).

394. (1) A lock tender shall record information about the compression and decompression of a worker in an air lock. O. Reg. 213/91, s. 394 (1).

(2) A separate record shall be kept for each air lock and each compression and decompression of a worker. O. Reg. 213/91, s. 394 (2).

(3) The information to be recorded is,

(a) the description of the air lock;

(b) the worker's name;

(c) the time of the beginning and end of each compression or decompression to which the worker is subjected;

(d) the pressure and temperature in the air lock before and after each compression or decompression to which the worker is subjected; and

(e) a description of any unusual occurrence respecting the worker, the air lock or any related matter. O. Reg. 213/91, s. 394 (3).

(4) A lock tender shall give the record to the superintendent. O. Reg. 213/91, s. 394 (4).

DECOMPRESSION PROCEDURES

395. (1) A worker who has been in air pressure greater than atmospheric air pressure for more than five minutes shall be decompressed down to atmospheric pressure in accordance with this section. O. Reg. 213/91, s. 395 (1).

(2) Subject to subsection (3), decompression shall be done in accordance with Table A.1 and Table A.2 as set out in the CSA Standard Z275.3-09 (R2014): Occupational Safety Code for Work in Compressed Air Environments. O. Reg. 64/18, s. 5 (1).

(3) The rate of decompression required by subsection (2) may be doubled with respect to a worker if, while performing the work in compressed air, the worker,

(a) has not been exposed to air pressure greater than 220 kilopascals;

(b) has remained under compressed air for a maximum of thirty minutes; and

(c) has not done manual work. O. Reg. 213/91, s. 395 (3).

(4) Subsection (3) applies only if every worker who is in the air lock,

(a) meets the requirements of clauses 3 (a), (b) and (c); and

(b) has previously experienced decompression. O. Reg. 213/91, s. 395 (4).

(5) A copy of the tables used for decompression described in subsection (2) shall be kept posted at a project,

(a) in each air lock;

(b) at the controls outside each air lock; and

(c) in each change room. O. Reg. 213/91, s. 395 (5); O. Reg. 64/18, s. 5 (2).

396. A worker who believes he or she has decompression sickness shall promptly notify,

(a) the superintendent or a project physician; or

(b) the lock tender, if the worker is under compressed air. O. Reg. 213/91, s. 396.

397. (1) The superintendent shall make a report at least once a week to a Director concerning every case of decompression sickness at a project occurring since the previous report, if any. O. Reg. 213/91, s. 397 (1); O. Reg. 145/00, s. 41 (1).

(2) The superintendent shall promptly make a report by telephone, two-way radio or other direct means to a Director concerning a case of decompression sickness that does not respond to first-aid treatment. O. Reg. 213/91, s. 397 (2); O. Reg. 145/00, s. 41 (2).

(3) A report under this section shall indicate, for each case of decompression sickness,

(a) the air pressure to which the worker was subjected;

(b) the length of time the worker was subjected to the air pressure;

(c) the nature of the medical treatment given to the worker; and

(d) the extent of the worker's recovery. O. Reg. 213/91, s. 397 (3).

398. OMITTED (REVOKES OTHER REGULATIONS). O. Reg. 213/91, s. 398.

399. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 213/91, s. 399.

TABLES 1, 2 REVOKED: O. Reg. 64/18, s. 6.

FORM 1 REVOKED: O. Reg. 64/18, s. 6.

Ontario Court of Justice
Last Updated: April 1, 2018

SCHEDULE 67

Occupational Health and Safety Act (as it relates to Ontario Regulation
213/91)

Item	Offence	Section	Set Fine
1	Supervisor failing to ensure worker wears protective headwear that complies with section 22 of O. Reg. 213/91	27 (1) (a)	\$450
2	Supervisor failing to ensure worker wears protective footwear that complies with section 23 of O. Reg. 213/91	27 (1) (a)	\$450
3	Supervisor failing to ensure worker wears eye protection under section 24 of O. Reg. 213/91	27 (1) (a)	\$450
4	Worker failing to work in compliance with subsection 26.1 (2) of O. Reg. 213/91 by not being adequately protected by fall protection	28 (1) (a)	\$350
5	Supervisor failing to ensure worker adequately protected by fall protection under subsection 26.1 (2) of O. Reg. 213/91	27 (1) (a)	\$550
6	Employer failing to ensure worker adequately protected by fall protection under subsection 26.1 (2) of O. Reg. 213/91	25 (1) (c)	\$650
7	Supervisor failing to ensure that worker works with guardrail system under subsection 26.3 (1) of O. Reg. 213/91	27 (1) (a)	\$550
8	Employer failing to ensure that guardrail system is used that complies with subsection 26.3 (1) of O. Reg. 213/91	25 (1) (c)	\$650
9	Constructor failing to ensure that guardrail system is used that complies with subsection 26.3 (1) of O. Reg. 213/91	23 (1) (a)	\$650

10	Worker working without precaution to prevent falling through opening under subsection 26.3(2) of O. Reg. 213/91	28 (1) (a)	\$250
11	Supervisor failing to ensure worker works with precaution to prevent falling through opening under subsection 26.3 (2) of O. Reg. 213/91	27 (1) (a)	\$450
12	Constructor failing to ensure precaution to prevent falling through opening complies with subsection 26.3 (2) of O. Reg. 213/91	23 (1) (a)	\$550
13	Employer failing to ensure precaution to prevent falling through opening complies with subsection 26.3 (2) of O. Reg. 213/91	25 (1) (c)	\$550
14	Constructor failing to ensure facilities are clean and sanitary under subsection 29 (11) of O. Reg. 213/91	23 (1) (a)	\$550
15	Constructor failing to ensure facilities meet requirements under subsection 29.1 (1) of O. Reg. 213/91	23 (1) (a)	\$550
16	Constructor failing to ensure material is removed or stored under subsection 35 (1) of O. Reg. 213/91	23 (1) (a)	\$550
17	Employer failing to ensure material is removed or stored under subsection 35(1) of O. Reg. 213/91	25 (1) (c)	\$550
18	Employer failing to provide suitable respiratory protective equipment under subsection 46 (2) of O. Reg. 213/91	25 (1) (a)	\$550
19	Supervisor failing to ensure worker wears respiratory equipment under subsection 46 (2) of O. Reg. 213/91	27 (1) (a)	\$450
20	Constructor failing to provide fire extinguishing equipment where required under section 52 of O. Reg. 213/91	23 (1) (a)	\$550
21	Employer failing to provide fire extinguishing equipment training under subsection 52 (1.1) of O. Reg. 213/91	25 (1) (c)	\$550
22	Employer failing to ensure traffic protection plan is kept on project under clause 67 (5) (b) of O. Reg. 213/91	25 (1) (c)	\$550

23	Supervisor failing to ensure worker does not direct traffic for multiple lanes in same direction under subsection 69 (2) of O. Reg. 213/91	27 (1) (a)	\$450
24	Supervisor failing to ensure worker who may be endangered by vehicular traffic wears garment under section 69.1 of O. Reg. 213/91	27 (1) (a)	\$450
25	Constructor failing to provide proper access and egress under subsection 70 (1) of O. Reg. 213/91	23 (1) (a)	\$550
26	Employer failing to provide proper access and egress under subsection 70 (1) of O. Reg. 213/91	25 (1) (c)	\$550
27	Employer failing to ensure ladder maintained so as not to endanger workers under section 79 of O. Reg. 213/91	25 (1) (b)	\$650
28	Employer failing to provide non-custom portable ladder that complies with subsection 80 (1) of O. Reg. 213/91	25 (1) (a)	\$550
29	Employer failing to provide custom ladder that complies with subsections 80 (2) – (5) of O. Reg. 213/91	25 (1) (a)	\$550
30	Employer failing to provide portable ladder that complies with subsection 82 (2) of O. Reg. 213/91	25 (1) (a)	\$650
31	Supervisor failing to ensure worker uses portable ladder that complies with subsection 82 (2) of O. Reg. 213/91	27 (1) (a)	\$450
32	Worker failing to use portable ladder that complies with subsection 82 (2) of O. Reg. 213/91	28 (1) (a)	\$250
33	Worker using defective or hazardous vehicle, machine, tool or equipment contrary to clause 93 (2) (a) of O. Reg. 213/91	28 (1) (a)	\$250
34	Supervisor failing to ensure worker does not use defective or hazardous vehicle, machine, tool or equipment contrary to clause 93 (2) (a) of O. Reg. 213/91	27 (1) (a)	\$450

35	Supervisor failing to ensure worker uses vehicle, machine, tool or equipment per operating manual under subsection 93 (3) of O. Reg. 213/91	27 (1) (a)	\$450
36	Employer failing to ensure worker uses vehicle, machine, tool or equipment per operating manual under subsection 93 (3) of O. Reg. 213/91	25 (1) (d)	\$550
37	Worker failing to use vehicle, machine, tool or equipment per operating manual under subsection 93 (3) of O. Reg. 213/91	28 (1) (a)	\$250
38	Employer failing to provide dump truck equipped with automatic audible alarm as required by section 105 of O. Reg. 213/91	25 (1) (a)	\$550
39	Worker failing to report dump truck not equipped with automatic audible alarm to employer or supervisor as required by section 105 of O. Reg. 213/91	28 (1) (d)	\$250
40	Supervisor failing to ensure worker does not do other work while acting as signaller under subsection 106 (1) of O. Reg. 213/91	27 (1) (a)	\$450
41	Supervisor failing to ensure that worker does not use object capable of moving and supported by a fork-lift truck, front-end loader or similar machine as a work place contrary to section 107 of O. Reg. 213/91	27 (1) (a)	\$450
42	Employer failing to ensure that mechanically operated part is guarded or fenced under section 109 of O. Reg. 213/91	25 (1) (a)	\$550
43	Supervisor failing to ensure that mechanically operated part is guarded or fenced under section 109 of O. Reg. 213/91	27 (1) (a)	\$450
44	Supervisor failing to ensure that a worker does not use a loose object as a work place or as a support for object contrary to section 115 of O. Reg. 213/91	27 (1) (a)	\$450

45	Worker failing to work in compliance with section 115 of O. Reg. 213/91 by using loose object as work place or as support for object	28 (1) (a)	\$350
46	Worker having or using stilts or leg extension devices contrary to section 116 of O. Reg. 213/91	28 (1) (a)	\$350
47	Employer failing to ensure worker complying with stilts and leg extension devices requirements under section 116 of O. Reg. 213/91	25 (1) (c)	\$550
48	Supervisor failing to ensure worker complying with stilts and leg extension devices requirements under section 116 of O. Reg. 213/91	27 (1) (a)	\$450
49	Supervisor failing to ensure worker wears adequate personal protective equipment while using fastening tool under clause 117 (3) (a) of O. Reg. 213/91	27 (1) (a)	\$450
50	Supervisor failing to ensure worker wears adequate eye protection while using fastening tool under clause 117 (3) (b) of O. Reg. 213/91	27 (1) (a)	\$450
51	Constructor failing to ensure scaffold complies with subsection 128 (1) of O. Reg. 213/91	23 (1) (a)	\$550
52	Employer failing to ensure scaffold complies with subsection 128 (1) of O. Reg. 213/91	25 (1) (c)	\$550
53	Supervisor failing to ensure worker works on scaffold that complies with subsection 128 (1) of O. Reg. 213/91	27 (1) (a)	\$450
54	Employer failing to ensure that scaffold complies with clause 129 (1) (a) of O. Reg. 213/91	25 (1) (c)	\$550
55	Supervisor failing to ensure worker works on scaffold that complies with clause 129 (1) (a) of O. Reg. 213/91	27 (1) (a)	\$450
56	Supervisor failing to ensure worker works on wheeled scaffold with brakes applied as required under clause 129 (1) (b) of O. Reg. 213/91	27 (1) (a)	\$450
57	Worker working on wheeled scaffold without brakes applied contrary to clause 129 (1) (b) of O. Reg. 213/91	28 (1) (a)	\$250

58	Employer failing to ensure scaffold platform or other work platform complies with subsection 135 (1) of O. Reg. 213/91	25 (1) (c)	\$550
59	Constructor failing to ensure scaffold platform or other work platform complies with subsection 135 (1) of O. Reg. 213/91	23 (1) (a)	\$550
60	Supervisor failing to ensure worker works on scaffold platform or other work platform that complies with subsection 135 (1) of O. Reg. 213/91	27 (1) (a)	\$450
61	Supervisor failing to ensure worker wears connected harness while on or getting on or off suspended platform or boatswain's chair under subsection 142.06 (1) of O. Reg. 213/91	27 (1) (a)	\$450
62	Employer failing to ensure worker given oral and written instruction on operating elevating work platform under section 147 of O. Reg. 213/91	25 (1) (c)	\$550
63	Employer failing to ensure worker trained to operate class of elevating work platform under section 147 of O. Reg. 213/91	25 (1) (c)	\$550
64	Supervisor failing to ensure worker attached to adequate anchorage point on specified elevating work platform contrary to clause 148 (1) (d) or (e) of O. Reg. 213/91	27 (1) (a)	\$450
65	Worker failing to be attached to adequate anchorage point on specified elevating work platform contrary to clause 148 (1) (d) or (e) of O. Reg. 213/91	28 (1) (a)	\$350
66	Constructor failing to ensure worker authorized under subsection 182 (1) of O. Reg. 213/91 connects, maintains or modifies electrical equipment or installations	23 (1) (a)	\$550
67	Employer failing to ensure worker authorized under subsection 182 (1) of O. Reg. 213/91 connects, maintains or modifies electrical equipment or installations	25 (1) (c)	\$550

68	Supervisor failing to ensure worker authorized under subsection 182 (1) of O. Reg. 213/91 connects, maintains or modifies electrical equipment or installations	27 (1) (a)	\$450
69	Constructor failing to ensure worker does not bring object closer to overhead electrical conductor than permitted under subsection 188 (2) of O. Reg. 213/91	23 (1) (a)	\$650
70	Employer failing to ensure worker does not bring object closer to overhead electrical conductor than permitted under subsection 188 (2) of O. Reg. 213/91	25 (1) (c)	\$650
71	Supervisor failing to ensure worker does not bring object closer to overhead electrical conductor than permitted under subsection 188 (2) of O. Reg. 213/91	27 (1) (a)	\$550
72	Worker bringing object closer to overhead electrical conductor than permitted under subsection 188 (2) of O. Reg. 213/91	28 (1) (a)	\$350
73	Constructor failing to designate a competent worker as a signaller under subsection 188 (8) of O. Reg. 213/91	23 (1) (a)	\$550
74	Employer failing to designate a competent worker as a signaller under subsection 188 (8) of O. Reg. 213/91	25 (1) (c)	\$550
75	Worker failing to work in compliance with subsection 195.1 (1) of O. Reg. 213/91 by using inadequately grounded cord-connected electrical equipment or tools	28 (1) (a)	\$350
76	Constructor permitting worker to enter non-compliant excavation contrary to section 224 of O. Reg. 213/91	23 (1) (a)	\$650
77	Employer failing to ensure clear work space in excavation as required by section 231 of O. Reg. 213/91	25 (1) (c)	\$550
78	Constructor failing to ensure area surrounding excavation kept clear as required by subsection 233 (1) of O. Reg. 213/91	23 (1) (a)	\$550

79	Employer failing to ensure area surrounding excavation kept clear as required by subsection 233 (1) of O. Reg. 213/91	25 (1) (c)	\$550
80	Employer failing to ensure worker does not operate machine so as to affect excavation wall stability contrary to subsection 233 (3) of O. Reg. 213/91	25 (1) (c)	\$550
81	Employer failing to ensure worker does not position machine so as to affect excavation wall stability contrary to subsection 233 (3) of O. Reg. 213/91	25 (1) (c)	\$550
82	Supervisor failing to ensure worker does not operate machine so as to affect excavation wall stability contrary to subsection 233 (3) of O. Reg. 213/91	27 (1) (a)	\$450
83	Supervisor failing to ensure worker does not position machine so as to affect excavation wall stability contrary to subsection 233 (3) of O. Reg. 213/91	27 (1) (a)	\$450
84	Constructor failing to ensure barrier provided at top of every excavation wall as required by subsection 233 (4) of O. Reg. 213/91	23 (1) (a)	\$550
85	Employer failing to ensure barrier provided at top of every excavation wall as required by subsection 233 (4) of O. Reg. 213/91	25 (1) (c)	\$550
86	Constructor failing to ensure support system designed by professional engineer as required by subsection 236 (1) of O. Reg. 213/91	23 (1) (a)	\$550
87	Employer failing to ensure support system designed by professional engineer as required by subsection 236 (1) of O. Reg. 213/91	25 (1) (c)	\$550
88	Constructor failing to ensure support system constructed in accordance with design drawings and specifications as required by subsection 236 (2) of O. Reg. 213/91	23 (1) (a)	\$550

89	Constructor failing to ensure support system installed in accordance with design drawings and specifications as required by subsection 236 (2) of O. Reg. 213/91	23 (1) (a)	\$550
90	Constructor failing to ensure support system used in accordance with design drawings and specifications as required by subsection 236 (2) of O. Reg. 213/91	23 (1) (a)	\$550
91	Constructor failing to ensure support system maintained in accordance with design drawings and specifications as required by subsection 236 (2) of O. Reg. 213/91	23 (1) (a)	\$550
92	Employer failing to ensure support system constructed in accordance with design drawings and specifications as required by subsection 236 (2) of O. Reg. 213/91	25 (1) (c)	\$550
93	Employer failing to ensure support system installed in accordance with design drawings and specifications as required by subsection 236 (2) of O. Reg. 213/91	25 (1) (c)	\$550
94	Employer failing to ensure support system used in accordance with design drawings and specifications as required by subsection 236 (2) of O. Reg. 213/91	25 (1) (c)	\$550
95	Employer failing to ensure support system maintained in accordance with design drawings and specifications as required by subsection 236 (2) of O. Reg. 213/91	25 (1) (c)	\$550
96	Supervisor failing to ensure support system used by worker in accordance with design drawings and specifications as required by subsection 236 (2) of O. Reg. 213/91	27 (1) (a)	\$450
97	Constructor failing to ensure ladder for access to or egress from excavation placed in protected area as required by section 240 of O. Reg. 213/91	23 (1) (a)	\$550

98	Employer failing to ensure ladder for access to or egress from excavation placed in protected area as required by section 240 of O. Reg. 213/91	25 (1) (c)	\$550
99	Supervisor failing to ensure ladder for worker access to or egress from excavation placed in protected area as required by section 240 of O. Reg. 213/91	27 (1) (a)	\$450
100	Constructor failing to ensure appropriate height of support system for walls under subsection 241 (1) of O. Reg. 213/91	23 (1) (a)	\$550
101	Employer failing to ensure appropriate height of support system for walls under subsection 241 (1) of O. Reg. 213/91	25 (1) (c)	\$550
102	Supervisor failing to ensure worker works in excavation with appropriate height of support system walls under subsection 241 (1) of O. Reg. 213/91	27 (1) (a)	\$450

Ontario Court of Justice
Last Updated: April 1, 2018

SCHEDULE 67.1

Ontario Regulation 213/91 under the *Occupational Health and Safety Act*

Item	Offence	Section	Set Fine
1.	Constructor failing to notify Ministry of Labour of construction project	6 (3)–(5)	\$550
2.	Constructor failing to notify Ministry of Labour of work on a trench	7	\$550
3.	Constructor failing to notify Ministry of Labour of use of suspended work platform system	7.1 (2) and (4)	\$550
4.	Constructor failing to appoint supervisor for project with five or more workers	14 (1)	\$550
5.	Constructor appointed supervisor failing to supervise work at all times	14 (2)	\$550
6.	Employer failing to appoint supervisor for five or more workers on project	15 (1)	\$550
7.	Employer appointed supervisor failing to supervise work at all times	15 (2)	\$550
8.	Constructor failing to establish written emergency procedures	17 (1)	\$550
9.	Constructor failing to post emergency procedures	17 (3)	\$550
10.	Worker failing to wear protective headwear	22	\$250
11.	Worker failing to wear protective footwear	23	\$250
12.	Worker failing to wear eye protection	24	\$250
13.	Employer failing to ensure training on fall protection	26.2 (1)	\$550
14.	Employer failing to ensure that written training and instruction record is prepared	26.2 (2)	\$550
15.	Employer failing to make training and instruction record available to inspector	26.2 (4)	\$550
16.	Constructor failing to ensure clean-up or toilet facilities available	29 (3) (a)	\$550
17.	Constructor failing to ensure required access to facilities	29 (4)–(7)	\$550
18.	Worker failing to use provided respiratory protective equipment	46 (2)	\$250

19.	Employer failing to develop written traffic protection plan for workers exposed to hazard from vehicular traffic	67 (4) and (5)	\$650
20.	Worker directing vehicular traffic for multiple lanes in the same direction	69 (2)	\$250
21.	Worker who may be endangered by vehicular traffic failing to wear prescribed garment	69.1	\$250
22.	Worker inappropriately standing or stepping on ladder	83 (2)	\$250
23.	Operator leaving controls of the machine unattended	102	\$250
24.	Worker passing shovel, backhoe or similar excavating machine or its load over a worker	103 (1)	\$250
25.	Worker passing crane or similar hoisting device's load over another worker	103 (2)	\$250
26.	Worker doing other work while acting as signaller	106 (1)	\$250
27.	Signaller failing to wear prescribed garment	106 (1.1)–(1.4)	\$250
28.	Worker using as a work place an object capable of moving supported by fork-lift truck, front-end loader or similar machine	107	\$250
29.	Worker failing to wear adequate personal protective equipment and clothing while using chain-saw	112 (1.2) (a)	\$250
30.	Worker failing to wear adequate eye and hearing protection while using chain-saw	112 (1.2) (b)	\$250
31.	Worker failing to wear adequate personal protective equipment while using fastening tool	117 (3) (a)	\$250
32.	Worker failing to wear adequate eye protection while using fastening tool	117 (3) (b)	\$250
33.	Employer failing to ensure that worker using suspended work platform system or boatswain's chair is trained	138 (1) and (2)	\$550
34.	Employer failing to ensure that competent worker is trained	138.1 (2) and (3)	\$550
35.	Owner failing to ensure there is an adequate roof plan	141.2 (1)	\$550
36.	Worker failing to wear full body harness connected to fall arrest system while on or getting on or off suspended work platform or boatswain's chair	142.06 (1)	\$350
37.	Constructor failing to notify Ministry of Labour of multi-point suspended work platform	142.3 (1)	\$550

38.	Worker without prescribed qualifications operating crane or similar hoisting device	150 (1)	\$250
39.	Worker without prescribed qualifications operating a crane or similar hoisting device	150 (2)	\$250
40.	Employer failing to ensure that qualified worker operates a rotary foundation drill rig	156.6 (1)	\$550
41.	Worker operating a rotary foundation drill rig without the prescribed training or qualifications	156.7	\$250
42.	Worker without prescribed qualifications connecting, maintaining or modifying electrical equipment or installations	182 (1)	\$250
43.	Constructor failing to establish and implement written measures and procedures	188 (4) (a) and 188 (5)	\$550
44.	Constructor failing to make written measures and procedures available to every employer on project	188 (4) (b)	\$550
45.	Employer failing to provide copy of written measures and procedures to a worker	188 (6)	\$550
46.	Employer failing to mark gas, electrical or other services before excavating	228 (1) (a)	\$650
47.	Employer failing to ensure that services are accurately located and marked before excavating	228 (1) (b)	\$550
48.	Worker failing to ensure that services are accurately located and marked before excavating	228 (1) (b)	\$250
49.	Constructor failing to take precautions to prevent damage to adjacent building or structure	229 (1)–(3)	\$550
50.	Worker operating machine so as to affect excavation wall stability	233 (3)	\$250
51.	Worker positioning machine so as to effect excavation wall stability	233 (3)	\$250
52.	Constructor failing to keep support system design drawings and specifications at project	236 (7)	\$550
53.	Employer failing to notify Director before working on tunnel, shaft, caisson or cofferdam	245 (1)	\$550

**REGULATION 860 – WORKPLACE HAZARDOUS
MATERIALS INFORMATION SYSTEM**

Occupational Health and Safety Act**R.R.O. 1990, REGULATION 860
WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)**

Consolidation Period: From January 21, 2019 to the e-Laws currency date.

Last amendment: 3/19.

This is the English version of a bilingual regulation.

DEFINITIONS

1. (1) In this Regulation,

“bulk shipment” means a shipment of a hazardous product that is contained without intermediate containment or intermediate packaging in,

- (a) a vessel with a water capacity equal to or greater than 450 litres,
- (b) a freight container, road vehicle, railway vehicle or portable tank,
- (c) the hold of a ship, or
- (d) a pipeline; (“expédition en vrac”)

“CAS registry number” means the identification number assigned to a chemical by the Chemical Abstracts Service, a division of the American Chemical Society; (“numéro d’enregistrement CAS”)

“container” includes a bag, barrel, bottle, box, can, cylinder, drum, storage tank or similar package or receptacle; (“contenant”)

“fugitive emission” means a gas, liquid, solid, vapour, fume, mist, fog or dust that meets the following conditions:

- 1. The gas, liquid, solid, vapour, fume, mist, fog or dust escaped from process equipment, from emission control equipment or from a product.
- 2. Workers may be readily exposed to the gas, liquid, solid, vapour, fume, mist, fog or dust; (“émission fugitive”)

“hazard information” means information on the proper and safe use, storage and handling of a hazardous product and includes information relating to the product’s health and physical hazards; (“renseignements sur les dangers”)

“hazardous product” means any product, mixture, material or substance

that is classified in accordance with the *Hazardous Products Regulations* (Canada) in a category or subcategory of a hazard class listed in Schedule 2 to the *Hazardous Products Act* (Canada); ("produit dangereux")

"*Hazardous Products Regulations* (Canada)" means the *Hazardous Products Regulations*, SOR/2015-17, made under the *Hazardous Products Act* (Canada); ("*Règlement sur les produits dangereux* (Canada)")

"hazardous waste" means a hazardous product that is acquired or generated for recycling or recovery or is intended for disposal; ("résidu dangereux")

"label" means a group of written, printed or graphic information elements that relate to a hazardous product, which is designed to be affixed to, printed on or attached to the hazardous product or the container in which the hazardous product is packaged; ("étiquette")

"laboratory sample" means a sample of a hazardous product that is packaged in a container that contains less than 10 kg of hazardous product and that is intended solely to be tested in a laboratory but does not include a sample that is to be used,

(a) by the laboratory for testing other products, mixtures, materials or substances, or

(b) for educational or demonstration purposes; ("échantillon pour laboratoire")

"manufactured article" means an article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, when being installed, if the intended use of the article requires it to be installed, and under normal conditions of use, will not release or otherwise cause an individual to be exposed to a hazardous product; ("article manufacturé")

"medical professional" means a person who, under the laws of the province in which the person is practising,

(a) is a legally-qualified medical practitioner, or

(b) is registered as a registered nurse; ("membre d'une profession médicale")

"product identifier" means, in respect of a hazardous product, the brand name, chemical name, common name, generic name or trade name; ("identificateur du produit")

"research and development" means systematic investigation or search carried out in a field of science or technology by means of experiment or analysis, other than investigation or search in respect of market research, sales promotion, quality control or routine testing of hazardous products, and includes,

- (a) applied research, namely, work undertaken for the advancement of scientific knowledge with a specific practical application in view, and
- (b) development, namely, use of the results of applied research for the purpose of creating new, or improving existing, processes or hazardous products; ("recherche et développement")

"safety data sheet" means,

- (a) a supplier safety data sheet, or
- (b) a safety data sheet prepared by an employer under subsection 18 (1) or (1.1) of this Regulation; ("fiche de données de sécurité")

"significant new data" means new data regarding the hazard presented by a hazardous product that change its classification, in accordance with the *Hazardous Products Regulations* (Canada), in a category or subcategory of a hazard class listed in Schedule 2 to the *Hazardous Products Act* (Canada), or results in its classification in another hazard class, or change the ways to protect against the hazard presented by the hazardous product; ("nouvelles données importantes")

"supplier label" means, in respect of a hazardous product, a label provided by a supplier that contains the information required by the *Hazardous Products Regulations* (Canada) for that hazardous product; ("étiquette du fournisseur")

"supplier safety data sheet" means, in respect of a hazardous product, a safety data sheet provided by a supplier that complies with the requirements of the *Hazardous Products Regulations* (Canada) for a safety data sheet; ("fiche de données de sécurité du fournisseur")

"workplace label" means, in respect of a hazardous product, a label that discloses,

- (a) a product identifier identical to that found on the safety data sheet for the hazardous product,
- (b) information for the safe handling of the hazardous product, and
- (c) that a safety data sheet, if supplied or produced, is available. ("étiquette du lieu de travail") R.R.O. 1990, Reg. 860, s. 1 (1); O.

Reg. 168/16, s. 2 (1-3), 3; O. Reg. 458/18. s. 1.

(2) In this Regulation, “produces” in relation to the production of a hazardous product does not include the production of a fugitive emission or of intermediate products undergoing reaction within a reaction vessel or process vessel. R.R.O. 1990, Reg. 860, s. 1 (2); O. Reg. 168/16, s. 2 (1).

DESIGNATION OF HAZARDOUS MATERIALS

2. Every hazardous product is designated as a hazardous material. R.R.O. 1990, Reg. 860, s. 2; O. Reg. 168/16, s. 2 (1).

ASSESSMENT OF BIOLOGICAL AND CHEMICAL AGENTS

3. (1) An employer shall assess all biological and chemical agents produced in the workplace for use therein to determine if they are hazardous materials. R.R.O. 1990, Reg. 860, s. 3 (1).

(2) No employer is required to assess under subsection (1),

(a) wood or a product made of wood;

(b) tobacco or a tobacco product within the meaning of section 2 of the *Tobacco Act* (Canada); or

(c) a manufactured article. R.R.O. 1990, Reg. 860, s. 3 (2); O. Reg. 168/16, s. 4 (1, 2).

(3) An assessment under subsection (1) shall be performed in accordance with Parts 7 and 8 of the *Hazardous Products Regulations* (Canada). R.R.O. 1990, Reg. 860, s. 3 (3); O. Reg. 168/16, s. 2 (2), 4 (3).

APPLICATION

4. (1) Sections 5 to 25 apply to employers and workers in respect of hazardous products used, stored and handled at a workplace. R.R.O. 1990, Reg. 860, s. 4 (1); O. Reg. 168/16, s. 2 (2).

(2) Section 8 (supplier labels), section 14 (laboratory samples) and sections 17 and 18 (safety data sheets) do not apply with respect to,

(a) an explosive within the meaning of section 2 of the *Explosives Act* (Canada);

(b) a cosmetic, device, drug or food within the meaning of section 2 of the *Food and Drugs Act* (Canada);

(c) a pest control product within the meaning of subsection 2 (1) of the *Pest Control Products Act* (Canada);

(d) a nuclear substance that is radioactive and that is within the

meaning of a nuclear substance under section 2 of the *Nuclear Safety and Control Act* (Canada); or

- (e) a consumer product within the meaning of section 2 of the *Canada Consumer Product Safety Act* (Canada). O. Reg. 168/16, s. 5 (1).
- (3) Sections 5 to 25 do not apply with respect to a hazardous product that,
 - (a) is wood or a product made of wood;
 - (b) is tobacco or a tobacco product within the meaning of section 2 of the *Tobacco Act* (Canada);
 - (c) is a manufactured article; or
 - (d) is being transported or handled in accordance with the requirements of the *Dangerous Goods Transportation Act* (Ontario) or the *Transportation of Dangerous Goods Act, 1992* (Canada). R.R.O. 1990, Reg. 860, s. 4 (3); O. Reg. 168/16, s. 2 (1), 5 (2-4).
- (4) Sections 5 to 25 do not apply with respect to hazardous waste except to the extent that an employer shall ensure the safe storage and handling of hazardous waste through a combination of identification and worker education. R.R.O. 1990, Reg. 860, s. 4 (4); O. Reg. 168/16, s. 5 (5).

EXEMPTIONS FROM CLAUSES 37 (1) (A) AND (B) OF THE ACT

5. (1) An employer may store a hazardous product received from a supplier without having a label on it, without obtaining a safety data sheet for it and without conducting a program of worker education about it while the employer is actively seeking a supplier label and a supplier safety data sheet for it. R.R.O. 1990, Reg. 860, s. 5 (1); O. Reg. 168/16, s. 2 (1, 3).

(2) An employer may store an employer-produced hazardous product without applying a label to it or using other identification for it, without a safety data sheet for it and without conducting a program of worker education about it while the employer is actively seeking the information about it that is required to prepare a workplace label and a safety data sheet. R.R.O. 1990, Reg. 860, s. 5 (2); O. Reg. 168/16, s. 2 (1, 3).

WORKER EDUCATION

6. (1) An employer shall ensure that a worker who works with or who may be exposed in the course of his or her work to a hazardous product received from a supplier is informed about all hazard information the employer receives from the supplier concerning the hazardous product and all further hazard information of which the employer is or ought to

be aware concerning its use, storage and handling. R.R.O. 1990, Reg. 860, s. 6 (1); O. Reg. 168/16, s. 2 (1), 6.

(2) An employer who produces a hazardous product in a workplace shall ensure that every worker who works with or who may be exposed in the course of his or her work to the hazardous product is informed about all hazard information of which the employer is or ought to be aware concerning the hazardous product and its use, storage and handling. R.R.O. 1990, Reg. 860, s. 6 (2); O. Reg. 168/16, s. 2 (1), 6.

7. (1) An employer shall ensure that every worker who works with or who may be exposed in the course of his or her work to a hazardous product is instructed in,

- (a) the contents required on labels and the purpose and significance of the information contained on the labels;
- (b) the contents required on a safety data sheet and the purpose and significance of the information contained on a safety data sheet;
- (c) procedures for the safe use, storage, handling and disposal of a hazardous product;
- (d) procedures for the safe use, storage, handling and disposal of a hazardous product when it is contained or transferred in,
 - (i) a pipe,
 - (ii) a piping system including valves,
 - (iii) a process vessel,
 - (iv) a reaction vessel, or
 - (v) a tank car, a tank truck, an ore car, a conveyor belt or a similar conveyance;
- (e) procedures to be followed when fugitive emissions are present; and
- (f) procedures to be followed in case of an emergency involving a hazardous product. R.R.O. 1990, Reg. 860, s. 7 (1); O. Reg. 168/16, s. 2 (1, 3), 7; O. Reg 458/18, s. 2.

(2) An employer shall ensure that the program of worker education required by subsection (1) is developed and implemented for the employer's workplace and is related to any other training, instruction and prevention programs at the workplace. R.R.O. 1990, Reg. 860, s. 7 (2).

(3) An employer shall ensure, so far as is reasonably practicable, that the program of worker instruction required by subsection (1) results in

the workers being able to use the information to protect their health and safety. R.R.O. 1990, Reg. 860, s. 7 (3).

LABELS

SUPPLIER LABELS

8. (1) An employer shall ensure that every hazardous product not in a container, and every container of a hazardous product, received at a workplace from a supplier is labelled with a supplier label. R.R.O. 1990, Reg. 860, s. 8 (1); O. Reg. 168/16, s. 2 (1).

(2) No employer shall alter a supplier label on a container in which a hazardous product is received from a supplier while any of the hazardous product remains in the container. R.R.O. 1990, Reg. 860, s. 8 (2); O. Reg. 168/16, s. 2 (1).

(3) If a label applied to a hazardous product or a container of a hazardous product becomes illegible or is removed, an employer shall replace the label with either a supplier label or a workplace label. R.R.O. 1990, Reg. 860, s. 8 (3); O. Reg. 168/16, s. 2 (1).

(4) Despite subsections (2) and (3), a supplier label may be removed from a container with a capacity of 3 mL or less if the label interferes with the normal use of the hazardous product. O. Reg. 168/16, s. 8.

(5) If an employer receives significant new data from a supplier about a hazardous product, the employer shall, as soon as practicable, attach to every relevant supplier label required under this section, new information that reflects the significant new data. O. Reg. 168/16, s. 8.

(6) An employer who imports and receives, under the *Hazardous Products Regulations* (Canada), a hazardous product for use in the employer's own workplace, without a supplier label or with a supplier label that does not meet all the labelling requirements of the *Hazardous Products Regulations* (Canada), shall affix to the product a label that meets the *Hazardous Products Regulations* (Canada) labelling requirements for that hazardous product. O. Reg. 168/16, s. 8.

(7) An employer who receives at a workplace an unpackaged hazardous product without a supplier label or a hazardous product transported as a bulk shipment without a supplier label, shall affix to the product a label that meets the *Hazardous Products Regulations* (Canada) labelling requirements for that hazardous product. O. Reg. 168/16, s. 8.

(8) Despite subsection (1), an employer shall replace a WHMIS 1988 supplier label on a hazardous product, or container of a hazardous product, by affixing to the product or container a workplace label or a

label that meets the Hazardous Products Regulations (Canada) labelling requirements for that hazardous product if,

- (a) the hazardous product or container was received at a workplace from a supplier on or before August 31, 2018;
- (b) the employer is unable to obtain a supplier label; and
- (c) the WHMIS 1988 supplier label would have complied with whichever of the following is applicable:
 - (i) the provisions of this Regulation relating to supplier labels for that hazardous product as they read immediately before July 1, 2016,
 - (ii) section 13 of this Regulation, as it read immediately before July 1, 2016,
 - (iii) section 14 of this Regulation, as it read immediately before July 1, 2016. O. Reg. 458/18, s. 3; O. Reg. 3/19, s. 1 (1).

(9) Despite subsection (8), an employer may replace a WHMIS 1988 supplier label provided by a supplier under section 14 of this Regulation, as it read immediately before July 1, 2016, with a label that includes the information required by section 14 of this Regulation, as it currently reads, if the conditions set out in section 14 are met. O. Reg. 458/18, s. 3.

(10) In this section,

“WHMIS 1988 supplier label” means,

- (a) a supplier label as defined by this Regulation, as it read immediately before July 1, 2016,
 - (b) a label provided by a supplier under section 13 of this Regulation, as it read immediately before July 1, 2016, or
 - (c) a label provided by a supplier under section 14 of this Regulation, as it read immediately before July 1, 2016. O. Reg. 3/19, s. 1 (2).
- (11) REVOKED: O. Reg. 3/19, s. 1 (2).

WORKPLACE LABELS FOR EMPLOYER-PRODUCED PRODUCTS

9. (1) An employer who produces a hazardous product in a workplace shall ensure that the hazardous product or the container of the hazardous product has a workplace label. R.R.O. 1990, Reg. 860, s. 9 (1); O. Reg. 168/16, s. 2 (1).

(2) Subsection (1) does not apply when the hazardous product is in a container that is intended to contain it for sale or disposition and the

container is, or is about to be, appropriately labelled. R.R.O. 1990, Reg. 860, s. 9 (2); O. Reg. 168/16, s. 2 (1).

(3) An employer shall update a workplace label referred to in subsection (1) as soon as practicable after significant new data about the product becomes available to the employer. O. Reg. 168/16, s. 9.

WORKPLACE LABELS FOR DECANTED PRODUCTS

10. (1) If a hazardous product that an employer receives in a container from a supplier is transferred to another container, the employer shall ensure that the other container has a workplace label. R.R.O. 1990, Reg. 860, s. 10 (1); O. Reg. 168/16, s. 2 (1).

(2) No supplier label, workplace label or label affixed under subsection 8 (8) is required on a portable container that is filled directly from a container of a hazardous product with a supplier label, workplace label or label affixed under subsection 8 (8),

- (a) if,
 - (i) the hazardous product is under the control of and is used exclusively by the worker who filled the portable container,
 - (ii) the hazardous product is used only during the shift in which the portable container was filled, and
 - (iii) the contents of the portable container are clearly identified;
or
- (b) if all of the hazardous product in the portable container is required for immediate use. R.R.O. 1990, Reg. 860, s. 10 (2); O. Reg. 168/16, s. 2 (1); O. Reg. 458/18, s.4; O. Reg. 3/19 s. 2.

IDENTIFICATION OF A HAZARDOUS PRODUCT IN PIPING SYSTEMS AND VESSELS

11. An employer shall ensure the safe use, storage and handling of a hazardous product in a workplace through worker education and the use of colour coding, labels, placards or another mode of identification when the hazardous product is contained or transferred in,

- (a) a pipe;
- (b) a piping system including valves;
- (c) a process vessel;
- (d) a reaction vessel; or
- (e) a tank car, a tank truck, an ore car, a conveyor belt or a similar conveyance. R.R.O. 1990, Reg. 860, s. 11; O. Reg. 168/16, s. 2 (1).

PLACARD IDENTIFIERS

12. No label is required on a hazardous product,

(a) if the hazardous product,

(i) is not in a container,

(ii) is in a container or in a form intended for export, or

(iii) is in a container that is intended to contain it for sale or distribution and the container is not about to be appropriately labelled as referred to in subsection 9 (2) but is to be appropriately labelled within the normal course of the employer's business and without undue delay; and

(b) if the employer posts a placard that discloses the information required on a workplace label for the hazardous product and is of such size and in such a location that the information is conspicuous and clearly legible to workers. R.R.O. 1990, Reg. 860, s. 12; O. Reg. 168/16, s. 2 (1).

TRANSITION, WORKPLACE LABELS

13. (1) An employer shall replace a WHMIS 1988 workplace label on a hazardous product, or container of a hazardous product, by affixing to the product or container a workplace label if,

(a) the WHMIS 1988 workplace label was affixed to the product or container on or before November 30, 2018;

(b) the WHMIS 1988 workplace label would have complied with the provisions of this Regulation relating to workplace labels for that hazardous product as they read immediately before July 1, 2016; and

(c) this Regulation requires that a workplace label be affixed to the product or container. O. Reg. 458/18, s. 5.

(2) In this section,

“WHMIS 1988 workplace label” means a workplace label as defined by this Regulation, as it read immediately before July 1, 2016. O. Reg. 3/19, s. 3.

(3) REVOKED O. Reg. 3/19, s. 3.

LABORATORY SAMPLES

14. (1) No supplier label is required on a laboratory sample of a hazardous product if,

- (a) the laboratory sample is exempt from labelling requirements under subsection 5 (5) or (6) of the *Hazardous Products Regulations* (Canada); and
 - (b) the supplier provides a label that is affixed to a container of the hazardous product and that discloses the information described in subsection (2). O. Reg. 168/16, s. 10.
- (2) A label referred to in clause (1) (b) shall disclose the following information about the hazardous product:
- 1. The chemical name or generic chemical name, if known to the supplier, of every material or substance in the hazardous product where,
 - i. individually, the material or substance is classified in accordance with the *Hazardous Products Regulations* (Canada) in a category or subcategory of a hazard class listed in Schedule 2 to the *Hazardous Products Act* (Canada) and is present above the relevant concentration limit, and
 - ii. in a mixture, the material or substance is present at a concentration that results in the mixture being classified in a category or subcategory of a hazard class.
 - 2. The statement “Hazardous Laboratory Sample, for hazard information or in an emergency call/Échantillon pour laboratoire de produit dangereux. Pour obtenir des renseignements sur les dangers ou en cas d’urgence, composez *insert the number described in paragraph 3*”.
 - 3. An emergency telephone number for the purposes of obtaining the information that must be provided on the safety data sheet for the hazardous product. O. Reg. 168/16, s. 10.
- 15.** (1) If an employer complies with subsection (2), no workplace label is required for a laboratory sample that,
- (a) is produced in the workplace or is in a container other than the container in which it was received from a supplier; and
 - (b) is clearly identified through a combination of identification visible to workers at the workplace and worker education. O. Reg. 168/16, s. 10.
- (2) For the purpose of subsection (1), the employer shall ensure that the identification and worker education for the laboratory sample enable the workers to readily identify and obtain either the information required on a safety data sheet, if one has been prepared, or the information

described in subsection 14 (2) on a label. O. Reg. 168/16, s. 10.

16. (1) If an employer complies with subsection (2), no workplace label is required for a hazardous product that,

- (a) is produced in a laboratory;
- (b) is intended by the employer solely for evaluation, analysis or testing for research and development;
- (c) is not removed from the laboratory; and
- (d) is clearly identified through a combination of identification visible to workers at the workplace and worker education. R.R.O. 1990, Reg. 860, s. 16 (1); O. Reg. 168/16, s. 2 (1).

(2) For the purposes of subsection (1), the employer shall ensure that the identification and worker education for the hazardous product enables workers to readily identify and obtain either the information required on a safety data sheet, if one has been prepared, or such other information as is necessary to ensure the safe use, storage and handling of the hazardous product. R.R.O. 1990, Reg. 860, s. 16 (2); O. Reg. 168/16, s. 2 (1, 3).

SAFETY DATA SHEETS

SUPPLIER SAFETY DATA SHEETS

17. (1) An employer who receives a hazardous product from a supplier for use, storage or handling at a workplace shall obtain a supplier safety data sheet for the hazardous product from the supplier unless the supplier is exempted under the *Hazardous Products Regulations* (Canada) from providing a safety data sheet for the hazardous product. O. Reg. 168/16, s. 11.

(2) An employer shall update a supplier safety data sheet obtained under subsection (1) as soon as practicable after significant new data about the product is provided by the supplier or otherwise becomes available to the employer. O. Reg. 168/16, s. 11.

(3) An employer may provide a safety data sheet in a different format from that of the supplier safety data sheet for the hazardous product or containing additional hazard information if,

- (a) the safety data sheet provided by the employer, subject to subsection 40 (6) of the Act, contains no less content than the supplier safety data sheet; and
- (b) the supplier safety data sheet is available at the workplace and the employer-provided safety data sheet indicates that fact. O. Reg.

168/16, s. 11.

EMPLOYER SAFETY DATA SHEETS

18. (1) An employer who produces a hazardous product at a workplace shall prepare a safety data sheet for the product that complies with the requirements of the *Hazardous Products Regulations* (Canada) for a safety data sheet. O. Reg. 168/16, s. 12.

(1.1) An employer who affixes a label under subsection 8 (8) or (9) or section 13, and who is unable to obtain a supplier safety data sheet for the hazardous product, shall prepare a safety data sheet for the product that complies with the requirements of the *Hazardous Products Regulations* (Canada) for a safety data sheet. O. Reg. 458/18, s. 6.

(2) No safety data sheet is required for a hazardous product that is a laboratory sample produced by the employer at the workplace. O. Reg. 168/16, s. 12.

(3) An employer shall update a safety data sheet referred to in subsection (1) as soon as practicable but not later than 90 days after significant new data about the hazardous product becomes available to the employer. O. Reg. 168/16, s. 12.

CONFIDENTIAL BUSINESS INFORMATION

19. (1) A claim under subsection 40 (1) of the Act for exemption from disclosure shall be made only in respect of,

- (a) in the case of a material or substance that is a hazardous product,
 - (i) the chemical name of the material or substance,
 - (ii) the CAS registry number or any other unique identifier of the material or substance, and
 - (iii) the chemical name of any impurity, stabilizing solvent or stabilizing additive that is present in the material or substance, that is classified in accordance with the *Hazardous Products Regulations* (Canada) in a category or subcategory of a hazard class listed in Schedule 2 to the *Hazardous Products Act* (Canada) and that contributes to the classification of the material or substance in the hazard class under that Act;
- (b) in the case of an ingredient that is in a mixture that is a hazardous product,
 - (i) the chemical name of the ingredient,
 - (ii) the CAS registry number or any other unique identifier of the

ingredient, and

(iii) the concentration or concentration range of the ingredient;

- (c) in the case of a material, substance or mixture that is a hazardous product, the name of any toxicological study that identifies the material or substance or any ingredient in the mixture;
- (d) the product identifier of a hazardous product, being its chemical name, common name, generic name, trade name or brand name;
- (e) information about a hazardous product, other than the product identifier, that constitutes a means of identification; and
- (f) information that could be used to identify a supplier of a hazardous product. O. Reg. 168/16, s. 12.

(2) If an employer excludes from a label or safety data sheet information in respect of which an exemption is claimed, the label or safety data sheet must contain all information otherwise required by this Regulation. O. Reg. 168/16, s. 12.

20. (1) An employer who files a claim under subsection 40 (1) of the Act for exemption from disclosure in respect of a hazardous product shall state on the safety data sheet and, if applicable, on the label for the hazardous product or container in which the hazardous product is packaged, the date that the claim for exemption was filed and the registry number assigned to the claim under the *Hazardous Materials Information Review Act* (Canada). O. Reg. 168/16, s. 12.

(2) The information described in subsection (1) shall remain on the safety data sheet or label until,

- (a) 30 days after the final disposition of the proceedings in relation to the claim for exemption; or
- (b) if an order is issued under the *Hazardous Materials Information Review Act* (Canada) in respect of the claim, the end of the period specified in the order. O. Reg. 168/16, s. 12.

21. If an employer files a claim under subsection 40 (1) of the Act for an exemption from disclosure in respect of a hazardous product that is produced in the employer's workplace and the employer excludes from the safety data sheet information in respect of which the exemption is claimed, the following rules apply with respect to the safety data sheet:

- 1. If the claim is being made in respect of information set out in clause 19 (1) (a) or subclauses 19 (1) (b) (i) or (ii) of this Regulation, the safety data sheet shall include:

- i. in the case of a hazardous product that is a material or substance, the generic chemical name of the material or substance, or
- ii. in the case of a hazardous product that is a mixture, the generic chemical name of each material or substance in the mixture that,
 - A. individually, is classified in accordance with the *Hazardous Products Regulations* (Canada) in a category or subcategory of a hazard class listed in Schedule 2 to the *Hazardous Products Act* (Canada), and is present above the relevant concentration limit, or
 - B. is present at a concentration that results in the mixture being classified in a category or subcategory of a hazard class.

2. If the claim is being made in relation to information set out in clause 19 (1) (d) of this Regulation, the safety data sheet shall include the code name or code number of the hazardous product. O. Reg. 168/16, s. 12.

22. REVOKED: O. Reg. 168/16, s. 12.

23. (1) An employer whose claim or a portion of whose claim under subsection 40 (1) of the Act for exemption from disclosure is determined to be valid shall disclose on the safety data sheet and, if applicable, on the label for the hazardous product or container in which the hazardous product is packaged,

- (a) a statement that an exemption has been granted;
- (b) the date of the decision granting the exemption; and
- (c) the registry number assigned to the claim under the *Hazardous Materials Information Review Act* (Canada). O. Reg. 168/16, s. 13.

(2) An employer shall disclose the information required under subsection (1) beginning not more than thirty days after the final disposition of the claim and ending on the last day of the exemption period. R.R.O. 1990, Reg. 860, s. 23 (2).

DISCLOSURE OF INFORMATION IN MEDICAL EMERGENCIES

24. For the purposes of clause 25 (2) (b) of the Act, an employer is required to provide information, including confidential business information, to a medical professional. R.R.O. 1990, Reg. 860, s. 24.

DISCLOSURE OF SOURCE OF TOXICOLOGICAL DATA

25. Subject to subsection 40 (6) of the Act, an employer who produces a hazardous product in a workplace shall disclose as quickly as possible under the circumstances the source of any toxicological data used by the employer to prepare a safety data sheet when the employer is requested to do so by,

- (a) an inspector;
- (b) a worker at the workplace;
- (c) a member of the committee, if any;
- (d) the health and safety representative, if any; or
- (e) in the absence of a committee or health and safety representative, a representative of the workers at the workplace. R.R.O. 1990, Reg. 860, s. 25; O. Reg. 168/16, s. 2 (1, 3), 14.

25.1 REVOKED: O. Reg. 458/18, s. 7.

CITATION

26. This Regulation may be cited as the *Workplace Hazardous Materials Information System (WHMIS) Regulation*. R.R.O. 1990, Reg. 860, s. 26.

REGULATION 1101 – FIRST AID REQUIREMENTS

R.R.O. 1990, REGULATION 1101

formerly under Workers' Compensation Act

FIRST AID REQUIREMENTS

Consolidation Period: From December 31, 1990 to the e-Laws currency date.

No amendments.

This Regulation is made in English only.

1. (1) A first aid station shall contain,

(a) a first aid box containing the items required by this Regulation; and

(b) a notice board displaying,

(i) the Board's poster known as Form 82,

(ii) the valid first aid certificates of qualification of the trained workers on duty, and

(iii) an inspection card with spaces for recording the date of the most recent inspection of the first aid box and the signature of the person making the inspection. R.R.O. 1990, Reg. 1101, s. 1 (1).

(2) A first aid station shall be in the charge of a worker who works in the immediate vicinity of the first aid station and who is qualified in first aid to the standards required by this Regulation. R.R.O. 1990, Reg. 1101, s. 1 (2).

(3) First aid stations shall be so located as to be easily accessible for the prompt treatment of any worker at all times when work is in progress. R.R.O. 1990, Reg. 1101, s. 1 (3).

2. (1) A first aid box shall contain as a minimum the first aid items required by this Regulation and all items in the box shall be maintained in good condition at all times. R.R.O. 1990, Reg. 1101, s. 2 (1).

(2) The box shall be large enough so that each item is in plain view and easily accessible. R.R.O. 1990, Reg. 1101, s. 2 (2).

3. Every employer shall at all times keep posted in other conspicuous places in the place of employment the Board's poster known as Form 82 respecting the necessity of reporting all accidents and receiving first aid treatment. R.R.O. 1990, Reg. 1101, s. 3.

4. The expense of furnishing and maintaining first aid appliances and services shall be borne by the employer. R.R.O. 1990, Reg. 1101, s. 4.

5. Every employer shall keep a record of all circumstances respecting an accident as described by the injured worker, the date and time of its occurrence, the names of witnesses, the nature and exact location of the injuries to the worker and the date, time and nature of each first aid treatment given. R.R.O. 1990, Reg. 1101, s. 5.

6. Employers shall inspect first aid boxes and their contents at not less than quarter-yearly intervals and shall mark the inspection card for each box with the date of the most recent inspection and the signature of the person making the inspection. R.R.O. 1990, Reg. 1101, s. 6.

7. The Board or its appointees may make inspections of first aid stations, appliances, services and records. R.R.O. 1990, Reg. 1101, s. 7.

FIRST AID REQUIREMENTS

8. (1) Every employer employing not more than five workers in any one shift at a place of employment shall provide and maintain at the place of employment a first aid station with a first aid box containing as a minimum,

- (a) a current edition of a standard St. John Ambulance First Aid Manual;
- (b) 1 card of safety pins; and
- (c) dressings consisting of,
 - (i) 12 adhesive dressings individually wrapped,
 - (ii) 4 sterile gauze pads, 3 inches square,
 - (iii) 2 rolls of gauze bandage, 2 inches wide,
 - (iv) 2 field dressings, 4 inches square or 2 four-inch sterile bandage compresses, and

(v) 1 triangular bandage. R.R.O. 1990, Reg. 1101, s. 8 (1).

(2) The employer shall ensure that the first aid station is at all times in the charge of a worker who,

- (a) is the holder of a valid St. John Ambulance Emergency First Aid Certificate or its equivalent; and
- (b) works in the immediate vicinity of the station. R.R.O. 1990, Reg. 1101, s. 8 (2).

9. (1) Every employer employing more than five workers and not more than fifteen workers in any one shift at a place of employment shall provide and maintain a first aid station with a first aid box containing as a minimum,

- (a) a current edition of a standard St. John Ambulance First Aid Manual;
- (b) 1 card of safety pins; and
- (c) dressings consisting of,
 - (i) 24 adhesive dressings individually wrapped,
 - (ii) 12 sterile gauze pads, 3 inches square,
 - (iii) 4 rolls of 2-inch gauze bandage,
 - (iv) 4 rolls of 4-inch gauze bandage,
 - (v) 4 sterile surgical pads suitable for pressure dressings, individually wrapped,
 - (vi) 6 triangular bandages,
 - (vii) 2 rolls of splint padding, and
 - (viii) 1 roll-up splint. R.R.O. 1990, Reg. 1101, s. 9 (1).

(2) The employer shall ensure that the first aid station is at all times in the charge of a worker who,

- (a) is the holder of a valid St. John Ambulance Standard First Aid Certificate or its equivalent; and
- (b) works in the immediate vicinity of the box. R.R.O. 1990, Reg. 1101,

s. 9 (2).

10. (1) Every employer employing more than fifteen and fewer than 200 workers in any one shift at a place of employment shall provide and maintain at the place of employment one stretcher, two blankets and a first aid station with a first aid box containing as a minimum,

- (a) a current edition of a standard St. John Ambulance First Aid Manual;
- (b) 24 safety pins;
- (c) 1 basin, preferably stainless steel; and
- (d) dressings consisting of,
 - (i) 48 adhesive dressings, individually wrapped,
 - (ii) 2 rolls of adhesive tape, 1 inch wide,
 - (iii) 12 rolls of 1-inch gauze bandage,
 - (iv) 48 sterile gauze pads, 3 inches square,
 - (v) 8 rolls of 2-inch gauze bandage,
 - (vi) 8 rolls of 4-inch gauze bandage,
 - (vii) 6 sterile surgical pads suitable for pressure dressings, individually wrapped,
 - (viii) 12 triangular bandages,
 - (ix) splints of assorted sizes, and
 - (x) 2 rolls of splint padding. R.R.O. 1990, Reg. 1101, s. 10 (1).

(2) The employer shall ensure that the first aid station is at all times in the charge of a worker who,

- (a) is the holder of a valid St. John Ambulance Standard First Aid Certificate or its equivalent; and
- (b) works in the immediate vicinity of the box. R.R.O. 1990, Reg. 1101, s. 10 (2).

FIRST AID ROOM

11. (1) Every employer employing 200 or more workers in any one shift at a place of employment shall provide and maintain a first aid room equipped with,

- (a) a current edition of a standard St. John Ambulance First Aid Manual;
- (b) instruments consisting of,
 - (i) dressing scissors,
 - (ii) dressing forceps,
 - (iii) safety pins,
 - (iv) graduated medicine glass,
 - (v) tongue depressors, and
 - (vi) applicators, cotton tipped;
- (c) denatured ethyl alcohol;
- (d) dressings consisting of,
 - (i) adhesive dressings, individually wrapped,
 - (ii) sterile gauze pads of assorted sizes, individually wrapped,
 - (iii) gauze bandages of assorted sizes,
 - (iv) adhesive plaster,
 - (v) absorbent cotton,
 - (vi) triangular bandages,
 - (vii) splints of assorted sizes, and
 - (viii) splint padding; and
- (e) furnishings consisting of,
 - (i) hot and cold running water,
 - (ii) 3 washbasins, preferably stainless steel,
 - (iii) 1 instrument sterilizer,

- (iv) 1 cabinet for surgical dressings,
- (v) 1 enamel foot bath,
- (vi) 1 sanitary disposal receptacle with lid,
- (vii) 1 first aid box containing as a minimum the items required by subsection 9 (1), for use by the attendant at the scene of an accident before the patient is moved to the first aid room or general hospital,
- (viii) 1 couch curtained off or in a separate cubicle,
- (ix) 1 stretcher, and
- (x) 2 blankets. R.R.O. 1990, Reg. 1101, s. 11 (1).

(2) The employer shall ensure that the first aid room is in the charge of,

(a) a registered nurse; or

(b) a worker who,

- (i) is the holder of a valid St. John Ambulance Standard First Aid Certificate or its equivalent,
- (ii) works in the immediate vicinity of the first aid room, and
- (iii) does not perform other work of a nature that is likely to affect adversely his or her ability to administer first aid. R.R.O. 1990, Reg. 1101, s. 11 (2).

(3) The certificate referred to in subclause (2) (b) (i) shall be prominently displayed in the first aid room. R.R.O. 1990, Reg. 1101, s. 11 (3).

12. Where the first aid station referred to in section 9 or 10 or the first aid room referred to in section 11 is not easily accessible in order to provide prompt treatment of any worker, an additional firstaid station or stations shall be established to comply with subsection 1 (3). R.R.O. 1990, Reg. 1101, s. 12.

TRANSPORTATION, CONSTRUCTION, FARM AND BUSH SITES

13. For the purposes of sections 8, 9, 10 and 11,

(a) a railway train, vessel or bus on a route, other than an urban or

suburban route, on which a worker is employed;

- (b) the central point from which bush workers are dispatched daily to work sites;
- (c) a vehicle being used by an employer to transport workers; or
- (d) the site of the construction, repair or demolition of a building,

shall be deemed to be a place of employment. R.R.O. 1990, Reg. 1101, s. 13.

14. (1) Where the place of employment is the site of construction, repair or demolition of a building, a first aid station shall be maintained in the time office for the project. R.R.O. 1990, Reg. 1101, s. 14 (1).

(2) Where there is no time office for the project, a first aid station shall be maintained in a vehicle or building at the site and section 1 applies. R.R.O. 1990, Reg. 1101, s. 14 (2).

15. Where the construction, repair or demolition of a building is in the charge of a general contractor, the general contractor shall provide and maintain the first aid station or stations required by this Regulation in respect of the workers in the same manner as if the general contractor were the employer of the workers. R.R.O. 1990, Reg. 1101, s. 15.

16. (1) Every employer of bush workers or farm workers, or both, shall provide at a central location a first aid box containing,

- (a) a current edition of a standard St. John Ambulance First Aid Manual;
- (b) 1 card of safety pins;
- (c) dressings consisting of,
 - (i) 16 adhesive dressings, individually wrapped,
 - (ii) 6 sterile gauze pads, 3 inches square,
 - (iii) 4 rolls of 3-inch gauze bandage,
 - (iv) 2 sterile surgical pads suitable for pressure dressings, individually wrapped, and
 - (v) 4 triangular bandages. R.R.O. 1990, Reg. 1101, s. 16 (1).

(2) Every employer using a vehicle to transport workers shall equip the vehicle with a first aid box containing,

- (a) a current edition of a standard St. John Ambulance First Aid Manual;
- (b) 1 card of safety pins;
- (c) dressings consisting of,
 - (i) 16 adhesive dressings, individually wrapped,
 - (ii) 6 sterile gauze pads, 3 inches square,
 - (iii) 4 rolls of 3-inch gauze bandage,
 - (iv) 2 sterile surgical pads suitable for pressure dressings, individually wrapped, and
 - (v) 4 triangular bandages. R.R.O. 1990, Reg. 1101, s. 16 (2).

(3) The employer of workers engaged in transporting goods outside an urban area in a vehicle shall equip the vehicle with a first aid kit containing,

- (a) a current edition of a standard St. John Ambulance First Aid Manual;
- (b) dressings consisting of,
 - (i) 12 adhesive dressings, individually wrapped,
 - (ii) 1 four-inch bandage compress,
 - (iii) 2 two-inch bandage compresses, and
 - (iv) 1 triangular bandage. R.R.O. 1990, Reg. 1101, s. 16 (3).

(4) Where a worker is operating heavy construction and maintenance equipment in a place where a first aid station is not readily available to him or her in the event of an accident, the employer shall equip the machinery with a first aid kit containing the items required by subsection (3) R.R.O. 1990, Reg. 1101, s. 16 (4).

(5) A bus operated on a route other than an urban route shall be equipped with a first aid kit containing the items required by subsection (3). R.R.O. 1990, Reg. 1101, s. 16 (5).

(6) Motive power units of all railways other than units used in yard service shall be equipped with a first aid box equipped with the items required by subsection (2). R.R.O. 1990, Reg. 1101, s. 16 (6).

**REGULATION 833 – CONTROL OF EXPOSURE TO
BIOLOGICAL OR CHEMICAL AGENTS**

R.R.O. 1990, REGULATION 833

CONTROL OF EXPOSURE TO BIOLOGICAL OR CHEMICAL AGENTS

Consolidation Period: July 1, 2020 to the e-Laws currency date.

Last amendment: 449/19

This is the English version of a bilingual regulation.

1. In this Regulation,

"ACGIH" means the American Conference of Governmental Industrial Hygienists; ("ACGIH")

"ACGIH Table" means the table entitled "Adopted Values" shown at pages 11 to 62 of the publication entitled *2017 Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices* published by ACGIH and identified by International Standard Book Number 978-1-607260-90-5; ("tableau de l'ACGIH")

"airline respirator" means a respirator and air supply hose with a hood or helmet, a tight-fitting facepiece, or a loose-fitting facepiece or visor, that is supplied with compressed breathing air from a compressed breathing air system; ("appareil de protection respiratoire à adduction d'air")

"air-purifying respirator" means a respirator with an air-purifying filter, cartridge or canister that removes specific air contaminants by passing ambient air through the air-purifying element; ("appareil de protection respiratoire à épuration d'air")

"assigned protection factor" means the anticipated level of respiratory protection that would be provided by a properly functioning respirator or class of respirators to properly fitted and trained users; ("facteur de protection caractéristique")

"C" or "ceiling limit" means the maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time; ("C", "valeur C", "valeur plafond")

"chemical agent" includes a chemical substance; ("agent chimique")

"direct-reading instrument" means a combustible gas indicator, oxygen meter, colorimetric indicator tube, organic vapour monitor or other instrument that can immediately detect and provide a measurement of an airborne chemical agent; ("instrument à lecture directe")

"exposure" means exposure by inhalation, ingestion, skin absorption or skin contact; ("exposition")

"HEPA filter" means a high efficiency particulate air filter that is at least 99.97 per cent efficient in removing particles with a mean aerodynamic diameter of 0.3 micrometres from the air; ("filtre HEPA")

"IDLH atmosphere" means an atmosphere that poses an immediate threat to life or that will cause irreversible adverse health effects or impair a worker's ability to escape from the environment; ("atmosphère DIVS")

"maximum use concentration" means the maximum concentration of an airborne biological or chemical agent that a respirator can be expected to protect a worker using the respirator from, as determined by multiplying the assigned protection factor set out in Schedule 2 for the respirator, or, if applicable, the simulated workplace protection factor for the respirator, by the occupational exposure limit set out for the substance in the Ontario Table or in the ACGIH Table; ("concentration d'utilisation maximale")

"NIOSH" means the National Institute for Occupational Safety and Health; ("NIOSH")

"Ontario Table" means Table 1 to this Regulation; ("tableau de l'Ontario")

"powered air-purifying respirator" means an air-purifying respirator that, by means of a powered blower worn by the user, passes ambient air through an air-purifying element and then supplies purified air to a helmet, hood, facepiece or visor worn by the user; ("appareil de protection respiratoire à épuration d'air à ventilation assistée")

"qualitative fit test" means a qualitative fit test method set out in Annex B of CSA Standard CAN/CSA-Z94.4-18, Selection, Use and Care of Respirators (September 2018); ("essai d'ajustement qualitatif")

"quantitative fit test" means a quantitative fit test method set out in Annex C of CSA Standard CAN/CSA-Z94.4-18, Selection, Use and Care of Respirators (September 2018); ("essai d'ajustement quantitatif")

"self-contained breathing apparatus" means a respirator that has a portable supply of breathing gas that is independent of the ambient atmosphere; ("appareil de protection respiratoire autonome")

"standard method for workplace air sampling and analysis" means a current standard method for measuring a biological or chemical agent that is published by,

(a) ASTM International,

- (b) the Health and Safety Executive (UK),
- (c) the Institut de recherche Robert-Sauvé en santé et en sécurité du travail (Québec),
- (d) the International Organization for Standardization,
- (e) NIOSH,
- (f) the Occupational Safety and Health Administration, United States Department of Labor, or
- (g) the United States Environmental Protection Agency; (“méthode normalisée d’échantillonnage et d’analyse de l’air d’un lieu de travail”)

“STEL” or “short-term exposure limit” means the maximum airborne concentration of a biological or chemical agent to which a worker may be exposed,

- (a) in any 15-minute period,
- (b) no more than four times during an eight hour work shift, and
- (c) with at least one hour between exposures; (“LECT”, “limite d’exposition à court terme”)

“SWPF” or “simulated workplace protection factor” means a surrogate measure of the workplace protection provided by a respirator, as determined in a controlled laboratory setting that simulates a workplace setting; (“FPSMT”, “facteur de protection simulé en milieu de travail”)

“tight-fitting” means designed to form a complete seal with the user’s face or neck; (“hermétique”)

“TWA” or “time-weighted average limit” means the time-weighted average airborne concentration of a biological or chemical agent to which a worker may be exposed in a work day or work week. (“LMPT”, “limite moyenne pondérée dans le temps”) O. Reg. 491/09, s. 1; O. Reg. 149/12, s. 1; O. Reg. 185/19, s. 1; O. Reg. 449/19, s. 1.

2. (1) REVOKED: O. REG. 347/15, s. 1.

(2) This Regulation does not apply,

- (a) to a chemical agent listed in Table 1 of Ontario Regulation 490/09 (Designated Substances) made under the Act, in a workplace that is subject to that regulation with respect to that agent; or
- (b) with respect to asbestos, in a workplace that is subject to Ontario Regulation 278/05 (Designated Substance — Asbestos on

**Construction Projects and in Buildings and Repair Operations)
made under the Act. O. Reg. 491/09, s. 2.**

2.1 Codes of practice relating to exposure of workers to biological or chemical agents that have been approved by the Minister for the purposes of subsection 32.2 (1) of the Act are available on the Ministry's or the Government of Ontario's website. O. Reg. 347/15, s. 2.

3. (1) Every employer shall take all measures reasonably necessary in the circumstances to protect workers from exposure to a hazardous biological or chemical agent because of the storage, handling, processing or use of such agent in the workplace. R.R.O. 1990, Reg. 833, s. 3 (1).

(2) The measures to be taken shall include the provision and use of,

- (a) substitution of the hazardous biological or chemical agent;
- (b) engineering controls;
- (c) administrative controls, including work practices;
- (d) hygiene facilities and practices; and
- (e) if section 7.2 applies, personal protective equipment. O. Reg. 185/19, s. 2.

4. Without limiting the generality of section 3, every employer shall take the measures required by that section to limit the exposure of workers to a hazardous biological or chemical agent in accordance with the following rules:

- 1. If the agent is listed in the Ontario Table, exposure shall not exceed the TWA, STEL, or C set out in the Ontario Table.
- 2. If the agent is not listed in the Ontario Table but is listed in the ACGIH Table, exposure shall not exceed the TWA, STEL, or C set out in the ACGIH Table.
- 3. If the Table that applies under paragraph 1 or 2 sets out a TWA for an agent but sets out neither a STEL nor a C for that agent, exposure shall not exceed the following excursion limits:
 - i. Three times the TWA for any period of 30 minutes.
 - ii. Five times the TWA at any time.
- 4. Paragraph 3 does not apply with respect to an agent that is prescribed as a designated substance under Ontario Regulation 490/09 (Designated Substances) made under the Act. O. Reg. 491/09, s. 4.

5. REVOKED: O. Reg. 185/19, s. 3.

Measuring airborne concentrations

6. (1) An employer shall ensure that procedures for monitoring, sampling and determining airborne concentrations of a biological or chemical agent and worker exposure to airborne concentrations of a biological or chemical agent,

- (a) comply with,
 - (i) a standard method for workplace air sampling and analysis or another method recognized in industrial hygiene practice, and
 - (ii) the rules set out in Schedule 1 to this Regulation; and

(b) are performed by, or under the direction of, a person who is qualified because of knowledge, training and experience in industrial hygiene practice. O. Reg. 185/19, s. 4.

(2) If a direct-reading instrument is used to determine airborne concentrations of a biological or chemical agent, the employer shall ensure that the instrument is used, calibrated and maintained in accordance with the manufacturer's instructions. O. Reg. 185/19, s. 4.

7. If the listing for an agent in the Ontario Table or in the ACGIH Table includes the notation "Skin" and the agent is present at the workplace, the employer shall take all measures reasonably necessary in the circumstances to protect workers from skin absorption of the agent. O. Reg. 491/09, s. 5.

7.1 If the listing for an agent in the ACGIH Table includes the reference "Simple asphyxiant" or "see Appendix F: Minimal Oxygen Content" and the agent is present in the air at the workplace, the employer shall take all measures reasonably necessary in the circumstances to protect workers from,

- (a) exposure to an atmospheric oxygen level that is less than 19.5 per cent by volume; and
- (b) related hazards such as fire and explosion. O. Reg. 491/09, s. 5.

Protection from biological or chemical agents

7.2. (1) An employer shall protect workers from exposure to a hazardous biological or chemical agent without requiring them to wear and use a respirator, unless subsection (2) applies or the employer complies with an applicable code of practice. O. Reg. 185/19, s. 5.

(2) The employer shall provide, and workers shall wear and use, a respirator appropriate in the circumstances to protect the workers from exposure to the agent,

- (a) if substitution of the agent is not reasonable or not practical; and
- (b) if engineering controls required by this Regulation,
 - (i) are not in existence or are not obtainable,
 - (ii) are not reasonable or not practical to adopt, install or provide because of the duration or frequency of the exposures or because of the nature of the process, operation or work,
 - (iii) are rendered ineffective because of a temporary breakdown of the controls, or
 - (iv) are ineffective to prevent, control or limit exposure because of an emergency. O. Reg. 185/19, s. 5.

(3) An employer who provides a worker with a respirator shall comply with the requirements set out in sections 9 to 13 of this Regulation. O. Reg. 185/19, s. 5.

8. (1) If a worker has been exposed to a hazardous biological or chemical agent and,

(a) the worker or the worker's physician has reason to believe that the worker's health has been affected by exposure to the agent and the worker or the worker's physician has so notified the employer in writing; or

(b) the employer has reason to believe that the worker's health is likely to be affected by the exposure and the employer has so notified the worker in writing,

the worker, if he or she agrees, shall undergo medical examinations and clinical tests, at the employer's expense, to determine whether the worker has an occupational illness because of exposure to the agent and whether the worker is fit, fit with limitations or unfit to continue working in exposure to the agent. O. Reg. 491/09, s. 6.

(2), (3) REVOKED: O. Reg. 491/09, s. 6.

(4) The employer shall provide the physician who examines the worker or under whose supervision clinical tests are performed with a copy of the records, if any, of the exposure of the worker to the hazardous biological or chemical agent. R.R.O. 1990, Reg. 833, s. 8 (4).

RESPIRATORY PROTECTION PROGRAM

Employer duties: respirators

9. (1) An employer who provides a worker with a respirator shall ensure that the respirator,

- (a) is appropriate in the circumstances for the form and concentration

of airborne biological or chemical agent in respect of which the respirator is to be used;

(b) meets or exceeds the requirements set out in this section and sections 10 to 13; and

(c) is used by workers in accordance with the requirements of this section and sections 10 to 13. O. Reg. 185/19, s. 6.

(2) An employer who provides a worker with a respirator shall establish written measures and procedures regarding the selection, care and use of respirators. O. Reg. 185/19, s. 6.

(3) An employer who provides a worker with a respirator shall provide training and instruction to the worker in the care and use of the respirator before the worker first uses the respirator. O. Reg. 185/19, s. 6.

(4) The training and instruction required under subsection (3) shall include training and instruction on the following:

1. Limitations of the respirator.
2. Inspection and maintenance of the respirator, including, in the case of an air-purifying respirator, end of service life indicators or change out schedules for the cartridge, canister or filter.
3. Proper fitting of the respirator.
4. Cleaning and disinfecting the respirator. O. Reg. 185/19, s. 6.

Respirator requirements

10. (1) A respirator must meet the following requirements:

1. It must be,
 - i. approved by NIOSH; or
 - ii. approved by a testing and certification agency other than NIOSH and, in the opinion of a person qualified because of knowledge, training and experience in industrial hygiene practice, afford the worker using it protection at least equal to the protection afforded by the use of a respirator approved by NIOSH.

2. It must meet or exceed the applicable assigned protection factor set out in Schedule 2. O. Reg. 185/19, s. 6.

(2) An employer who provides a worker with a respirator shall have regard to the following when selecting the respirator:

1. The airborne concentration of the biological or chemical agent to which the worker is exposed, calculated in accordance with

Schedule 1, and the maximum use concentration of the respirator.

2. The manufacturer's information on the intended use, scope and limitations of the respirator.
3. The potential for an atmosphere with an oxygen concentration of less than 19.5 per cent, an IDLH atmosphere, or oil in the atmosphere. O. Reg. 185/19, s. 6.

(3) If a respirator is used to protect a worker from exposure to asbestos, it must be,

- (a) equipped with a HEPA filter; or
- (b) equipped with a N-100, R-100 or P-100 particulate filter. O. Reg. 185/19, s. 6.

(4) If an airline respirator is used in an IDLH atmosphere, it must be fitted with an auxiliary supply of breathing air that is sufficient to permit the worker to escape unassisted from the atmosphere. O. Reg. 185/19, s. 6.

(5) If a respirator is supplied with breathing air from an air cylinder or a compressed breathing air system, the following requirements must be met:

1. The breathing air must meet the purity requirements set out in Table 1 of CSA Standard CAN/CSA-Z180.1-13 (R2018), Compressed Breathing Air and Systems (2018).
2. If a compressed breathing air system uses a compressor with an operating pressure greater than 103.4 kPa to supply the breathing air, the breathing air must be tested at least once every six months to ensure that it meets the requirement set out in paragraph 1.
3. The air intake used in connection with a compressed breathing air system must,
 - i. for breathing air delivered by a compressor with an operating pressure greater than 103.4 kPa, be located in accordance with section 6 (Air intakes) and Annex A of CSA Standard CAN/CSA-Z180.1-13 (R2018), Compressed Breathing Air and Systems (2018), and
 - ii. for breathing air delivered by an ambient air system, be located in accordance with section 6 (Air intakes) and Annex B of CSA Standard CAN/CSA-Z180.1-13 (R2018), Compressed Breathing Air and Systems (2018),
4. If a compressed breathing air system uses an oil-lubricated compressor to supply the breathing air,

Control of Exposure to Biological or Chemical Agents

- i. a continuous carbon monoxide monitor equipped with audible and visual alarms that activate at 5 ppm must be provided, and
- ii. the continuous carbon monoxide monitor must be calibrated in accordance with the manufacturer's instructions. O. Reg. 185/19, s. 6.

Requirements: use of respirator

11. (1) A respirator shall be used in accordance with the manufacturer's instructions. O. Reg. 185/19, s. 6.

(2) A worker shall not be assigned to an operation that requires the use of a respirator unless the worker is physically able to perform the operation while using the respirator. O. Reg. 185/19, s. 6.

Requirements: tight-fitting respirator

12. (1) A respirator that is designed to be tight-fitting shall be tested for fit in accordance with one of the following:

1. A qualitative fit test.
2. A quantitative fit test. O. Reg. 185/19, s. 6.

(2) A worker shall conduct positive and negative pressure user seal checks prior to every use of a tight-fitting elastomeric respirator. O. Reg. 185/19, s. 6.

(3) A respirator that is designed to be tight-fitting shall not be provided to, or used by, a worker with facial hair that comes between the sealing surface of the facepiece and the face or that interferes with the functioning of the respirator. O. Reg. 185/19, s. 6.

Requirements: care and maintenance of respirator

13. A respirator shall be cared for and maintained in accordance with the manufacturer's instructions. O. Reg. 185/19, s. 6.

Table 1
Ontario Table of Occupational Exposure limits

<i>List ing</i>	<i>French Listing Equiv- alent</i>	<i>Agent [CAS No.]</i>	<i>Time- Weighted Average Limit (TWA)</i>	<i>Short-Term Exposure Limit (STEL) or Ceiling Limit (C)</i>	<i>Notations</i>
1.	4.	*Acrylonitrile [107-13-1]	2 ppm	C 10 ppm	Skin
2a.	50a.	REVOKED: O. Reg. 287/17, s. 3 (1)			
2b.	50b.	REVOKED: O. Reg. 287/17, s. 3 (1)			
3.	7.	*Arsenic, elemental arsenic and inorganic compounds [7440-38-2], and organic compounds (only where both inorganic and organic compounds are present), as As.	0.01 mg/ m ³	0.05 mg/m ³	
4a.	5a.	*Asbestos – All forms [1332-21-4]	0.1 f/cc (F)		
4b.	5b.	*Asbestos – Actinolite [77536-66-4]	0.1 f/cc (F)		
4c.	5c.	*Asbestos – Amosite [12172-73-5]	0.1 f/cc (F)		

4d.	5d.	*Asbestos – Anthophyllite [77536-67-5]	0.1 f/cc (F)		
4e.	5e.	*Asbestos – Chrysotile [132207-32-0]	0.1 f/cc (F)		
4f.	5f.	*Asbestos – Crocidolite [12001-28-4]	0.1 f/cc (F)		
4g.	5g.	*Asbestos – Tremolite [77536-68-6]	0.1 f/cc (F)		
5.	10.	Benzaldehyde [100-52-7]		4 ppm, or 17 mg/m ³	
6.	11.	*Benzene [71-43-2]	0.5 ppm	2.5 ppm	Skin
7.	12.	REVOKED: O. Reg. 287/17, s. 3 (1)			
8.	19.	Calcium chloride [10043-52-4]	5 mg/m ³		
9.	15.	Carbon tetrachloride [56-23-5]	2 ppm	3 ppm	Skin
10.	16.	Charcoal, except activated [16291-96-6]	10 mg/m ³		
11.	66.	Chlorinated diphenyl oxides [55720-99-5]	0.5 mg/ m ³	2 mg/m ³	
12.	17.	o-Chlorobenz aldehyde [89-98-5]		4 ppm, or 23 mg/m ³	
13a.	14a.	Chlorodiphenyl (42 per cent chlorine) [53469-21-9]	See listing for Polychlor inated Biphenyls (PCBs)		

Table 1

Regulation 833
Control of Exposure to Biological or Chemical Agents

13b.	14b.	<i>Chlorodiphenyl</i> (54 per cent chlorine) [11097-69-1]	<i>See listing for Polychlorinated Biphenyls (PCBs)</i>		
14.	22.	<i>N-Cocomorpholine</i> [1541-81-7]	5 ppm, or 52 mg/m ³		Skin
15.	46.	<i>*Coke Oven Emissions¹</i>	0.15 mg/m ³		
16.	87.	<i>Coumarone-Indene Resins (total dust)</i> [63393-89-5]	5 mg/m ³		
17.	24.	<i>Cymene (sum of o-, m- and p-isomers)</i> [25155-15-1]	50 ppm, or 274 mg/m ³		Skin
18.	28.	<i>1,1-Dichloroethene</i> [75-35-4]	1 ppm, or 4 mg/m ³	20 ppm, or 80 mg/m ³	
19.	29.	<i>1,3-Dichloro-2-Propanol</i> [96-23-1]		1 ppm, or 5 mg/m ³	Skin
20.	40.	<i>Diethylene glycol monoethyl ether</i> [111-90-0]	30 ppm, or 165 mg/m ³		
21.	74.	<i>Di(2-ethylhexyl) phthalate (DEHP)</i> [117-81-7]	3 mg/m ³	5 mg/m ³	
22.	73.	<i>Diisodecyl phthalate</i> [26761-40-0]	5 mg/m ³		
23.	30.	<i>3-(Dimethylamino) propylamine</i> [109-55-7]	0.5 ppm, or 2 mg/m ³		Skin

24.	31.	<i>N, N</i> -Dimethyl- cyclohexyla mine [98-94-2]		5 ppm, or 26 mg/m ³	
25.	32.	<i>N, N</i> -Dimethyl- ethanolamine [108-01-0]	3 ppm, or 11 mg/ m ³	6 ppm, or 22 mg/m ³	
26.	103.	Dimethyl terephth alate [120-61-6]	5 mg/m ³		
27.	18.	Dimethyl 2,3,5,6-tetra chlorotere phthalate [1861-32-1]	5 mg/m ³		
28.	59.	Dipropylene glycol mono methyl ether acetate [88917-22-0]	100 ppm, or 776 mg/ m ³	150 ppm, or 1,164 mg/m ³	
29.	34.	Diquat [2764-72-9; 85-00-7; 6385-62-2]	0.5 mg/ m ³ , or 0.1 mg/ m ³ (R)		Skin
30.	35.	Enflurane [13838-16-9]	2 ppm, or 16 mg/ m ³		
31.	42.	Ethyl-3-ethoxy propionate [763-69-9]	50 ppm, or 300 mg/ m ³		
32.	26.	Ethylene dibromide [106-93-4]	(L)		Skin
33.	39.	Ethylene glycol dimethyl ether [110-71-4]	5 ppm, or 18 mg/ m ³		Skin

Table 1

Regulation 833
Control of Exposure to Biological or Chemical Agents

34.	41.	Ethylene glycol mono-n-propyl ether [2807-30-9]	25 ppm, or 110 mg/m ³		Skin
35.	63.	Ethylene glycol mononitrate [16051-48-2]	0.05 ppm, or 0.22 mg/m ³		Skin
36.	67.	*Ethylene oxide [75-21-8]	1 ppm, or 1.8 mg/m ³	10 ppm, or 18 mg/m ³	
37.	57.	Ethyl methacrylate [97-63-2]	50 ppm	100 ppm	
38.	79.	Flour dust	See listing for Wheat Flour Dust (total dust)		
39.	44.	Forane [26675-46-7]	2 ppm, or 15 mg/m ³		
40.	45.	Formaldehyde [50-00-0]		STEL 1 ppm, or C 1.5 ppm	
41.	47.	Halothane [151-67-7]	2 ppm, or 16 mg/m ³		
42.	1.	Heptyl acetate [112-06-1]	50 ppm, or 320 mg/m ³		
43.	48.	Hexamethylenetetramine (HMT) [100-97-0]		0.35 ppm, or 2 mg/m ³	
44.	49.	Hexamethyl phosphoramide [680-31-9]	(L)		Skin
45.	2.	Hexyl acetate (isomeric mixture) [88230-35-7]	50 ppm, or 294 mg/m ³		

46.	97.	<i>Hydrogen sulfide [7783-06-4]</i>	<i>10 ppm</i>	<i>15 ppm</i>	
47.	104.	<i>Hydrogenated terphenyls² [61788-32-7]</i>	<i>0.5 ppm</i>		
48a.	52a.	<i>*Isocyanates, organic compounds – Toluene diisocyanate (TDI) [584-84-9] [91-08-7]</i>	<i>0.005 ppm</i>	<i>C 0.02 ppm</i>	
48b.	52b.	<i>*Isocyanates, organic compounds – Methylene bisphenyl isocyanate (MDI) [101-68-8]</i>	<i>0.005 ppm</i>	<i>C 0.02 ppm</i>	
48c.	52c.	<i>*Isocyanates, organic compounds – Hexamethylene diisocyanate (HDI) [822-06-0]</i>	<i>0.005 ppm</i>	<i>C 0.02 ppm</i>	
48d.	52d.	<i>*Isocyanates, organic compounds – Isophorone diisocyanate (IPDI) [4098-71-9]</i>	<i>0.005 ppm</i>	<i>C 0.02 ppm</i>	
48e.	52e.	<i>*Isocyanates, organic compounds – Methylene bis (4-cyclohexyl isocyanate) [5124-30-1]</i>	<i>0.005 ppm</i>	<i>C 0.02 ppm</i>	

Table 1

Regulation 833
Control of Exposure to Biological or Chemical Agents

48f.	52f.	*Isocyanates, organic compounds – Methyl isocyanate [624-83-9]	0.02 ppm	0.06 ppm	Skin
48g.	52g.	*Isocyanates, organic compounds – Ethyl isocyanate [109-90-0]	0.02 ppm	0.06 ppm	Skin
48h.	52h.	*Isocyanates, organic compounds – Phenyl isocyanate [103-71-9]	0.05 ppm	0.015 ppm	Skin
49.	53.	Isopropyl aminoe thanols [109-56-8] [121-93-7]		400 ppm, or 1,900 mg/m ³	
50.	33.	Isosorbide dinitrate [87-33-2]	0.2 mg/m ³		Skin
51a.	77a.	*Lead [7439-92-1], elemental lead, inorganic and organic compounds of lead, as Pb – except tetraethyl lead [78-00-2]	0.05 mg/m ³		Skin (organic compounds)
51b.	77b.	*Lead [7439-92-1] – Tetraethyl lead, as Pb [78-00-2]	0.10 mg/m ³	0.30 mg/m ³	

52a.	21a.	<i>*Lead chromate [7758-97-6] – as Pb (see listing for lead) [7439-92-1]</i>	<i>0.05 mg/m³</i>		
52b.	21b.	<i>*Lead chromate [7758-97-6] – as Cr</i>	<i>0.012 mg/m³</i>		
53.	54.	<i>Lincomycin [154-21-2]</i>	<i>0.1 mg/m³</i>		
54a.	51a.	<i>Lithium hydroxide – Anhydrous [1310-65-2]</i>		<i>1 mg/m³</i>	
54b.	51b.	<i>Lithium hydroxide – Monohydrate [1310-66-3]</i>		<i>1 mg/m³</i>	
55.	55.	<i>Manganese [7439-96-5]</i>	<i>0.2 mg/m³</i>		
56a.	56a.	<i>*Mercury [7439-97-6], elemental mercury, inorganic and organic compounds of mercury, as Hg – All forms of except alkyl, as Hg</i>	<i>0.025 mg/m³</i>		<i>Skin</i>
56b.	56b.	<i>*Mercury [7439-97-6] – Alkyl compounds of, as Hg</i>	<i>0.01 mg/m³</i>	<i>0.03 mg/m³</i>	<i>Skin</i>
57.	58.	<i>Methoxy flurane [76-38-0]</i>	<i>2 ppm, or 13 mg/m³</i>		

Table 1

Regulation 833
Control of Exposure to Biological or Chemical Agents

58.	60.	Methyl n-amyl ketone [110-43-0]	25 ppm, or 115 mg/m ³		
59.	38.	Methyl tert-butyl ether (MTBE) [1634-04-4]	40 ppm		
60.	61.	Methyl n-butyl ketone [591-78-6]	1 ppm, or 4 mg/m ³		Skin
61.	27.	4,4'-Methylene bis(2-chloroaniline) (MBOCA; MOCA®) [101-14-4]	0.0005 ppm, or 0.005 mg/m ³		Skin
62.	25.	4,4'-Methylene dianiline [101-77-9]	0.04 mg/m ³		Skin
63.	62.	N-Methyl-2-pyrrolidone [872-50-4]	400 mg/m ³		
64.	36.	Mineral Spirits	525 mg/m ³		
65.	98.	Nepheline syenite (total dust) [37244-96-5]	10 mg/m ³		
66a.	64a.	Nickel – Elemental/metal [7440-02-0]	1 mg/m ³ (l)		
66b.	64b.	Nickel – Insoluble compounds, as Ni [7440-02-0]	0.2 mg/m ³ (l)		
66c.	64c.	Nickel – Soluble compounds, as Ni [7440-02-0]	0.1 mg/m ³ (l)		

66d.	64d.	Nickel – Nickel subsulfide, as Ni [12035-72-2]	0.1 mg/ m ³ (l)		
67.	8.	Nitrogen dioxide [10102- 44-0]	3 ppm	5 ppm	
68.	65.	N-Nitrosamine, including n-Nitrosodi methylamine [62-75-9]	(L)		Skin
69.	9.	Nitrous oxide [10024-97-2]	25 ppm, or 45 mg/ m ³		
70.	68.	Ozone [10028- 15-6]	0.1 ppm, or 0.2 mg/ m ³	0.3 ppm, or 0.6 mg/m ³	
71.	69.	Paraquat [4685-14-7]	0.1 mg/ m ³		
72.	70.	Particles (Insoluble or Poorly Soluble) Not Otherwise Specified (PNOS)	10 mg/ m ³ (l), or 3 mg/ m ³ (R)		
73.	71.	Penicillin (total dust) [1406- 05-9]	0.1 mg/ m ³		
74.	101.	Pentaerythritol tetrabenzoate [4196-86-5]		2 mg/m ³	
75.	23.	Petroleum coke (total dust) [64741-79-3]	3.5 mg/ m ³ (a)		
76.	72.	2-Phenoxy ethanol [122-99-6]	25 ppm, or 141 mg/ m ³		Skin
77a.	76a.	Platinum [7440-06-4] – Metal	1 mg/m ³		

77b.	76b.	Platinum [7440-06-4] – Water-soluble compounds of, including chloro platinates (as Pt)	0.002 mg/m ³		
78.	13.	Polychlorinated biphenyls (PCBs) ²	0.05 mg/ m ³		
79.	84.	Poultry dust (total dust)	5 mg/m ³		
80.	85.	1,2-Propylene glycol [57-55-6]	50 ppm (V), or 155 mg/ m ³ (V), or 10 mg/ m ³ (H)(b)		
81.	3.	Propylene glycol monomethyl ether acetate [108-65-6]	50 ppm, or 270 mg/ m ³		
82.	88.	Selenium hexafluoride, as Se [7783-79-1]	0.025 ppm, or 0.1 mg/ m ³		
83.	82.	Shellac dust (total dust) [9000-59-3]	10 mg/m ³		
84a.	91a.	*Silica, Crystalline – Quartz/Tripoli [14808-60-7; 1317-95-9]	0.10 mg/ m ³ (R)		
84b.	91b.	*Silica, Crystalline – Cristobalite [14464-46-1]	0.05 mg/ m ³ (R)		
85.	90.	Silica fume [69012-64-2]	2 mg/ m ³ (R)		
86.	89.	Silica fused [60676-86-0]	0.1 mg/ m ³ (R)		

87a.	92a.	Silicon carbide [409-21-2] – Non-fibrous	10 mg/ m ³ (I)(E), or 3 mg/ m ³ (R)(E)		
87b.	92b.	Silicon carbide [409-21-2] – Fibrous (including whiskers)	0.1 f/cc (R)(F)		
88.	83.	Sisal dust (total dust)	2 mg/m ³		
89.	81.	Soap dust [68918-36-5]	5 mg/m ³		
90.	95.	Spectinomycin [1695-77-8]	2 mg/m ³		
91.	93.	Stoddard Solvent –140°F Flash Aliphatic Solvent, Type of Stoddard Solvent	525 mg/ m ³		
92.	96.	Styrene – monomer [100-42-5]	35 ppm	100 ppm	
93.	94.	Sulfur dioxide [7446-09-5]	2 ppm, or 5.2 mg/ m ³	5 ppm, or 10.4 mg/m ³	
94a.	43a.	Synthetic Vitreous Fibres (Man Made Mineral Fibres) – Continuous filament glass fibres	5 mg/ m ³ (I), or 1 f/cc (F)		
94b.	43b.	Synthetic Vitreous Fibres (Man Made Mineral Fibres) – Glass wool fibres	1 f/cc (F)		

Table 1

Regulation 833
Control of Exposure to Biological or Chemical Agents

94c.	43c.	Synthetic Vitreous Fibres (Man Made Mineral Fibres) – Refractory ceramic fibres	0.5 f/cc (F)		
94d.	43d.	Synthetic Vitreous Fibres (Man Made Mineral Fibres) – Rock wool fibres	1 f/cc (F)		
94e.	43e.	Synthetic Vitreous Fibres (Man Made Mineral Fibres) – Slag wool fibres	1 f/cc (F)		
94f.	43f.	Synthetic Vitreous Fibres (Man Made Mineral Fibres) – Special purpose glass fibres	1 f/cc (F)		
94g.	43g.	Synthetic Vitreous Fibres (Man Made Mineral Fibres) – Synthetic Vitreous Fibres, not otherwise classified (excluding fibrous glass dust and mineral wool fibre)	1 f/cc (F) (c)		
95.	99.	Talc [14807- 96-6] ,containing no asbestos	2 mg/ m ³ (R)(E), or 2 f/cc (K)		

96.	100.	<i>Tellurium hexafluoride, as Te</i> [7783-80-4]	0.01 ppm, or 0.1 mg/m ³		
97.	6.	<i>Tetrachloro phthalic anhydride</i> [117-08-8]	0.1 mg/m ³		
98.	102.	<i>Tetrachloro phenol</i> [25167-83-3]	0.5 mg/m ³		Skin
99.	86.	<i>Tetrasodium pyrophosphate</i> [7722-88-5]	5 mg/m ³		
100a.	37a.	<i>Tin, as Sn</i> [7440-31-5] – Metal	2 mg/m ³		
100b.	37b.	<i>Tin, as Sn</i> [7440-31-5] – Oxide and inorganic compounds, as Sn, except tin hydride	2 mg/m ³		
100c.	37c.	<i>Tin, as Sn</i> [7440-31-5] – Organic compounds, as Sn	0.1 mg/m ³		Skin (organic compounds)
101.	105.	<i>o-Tolidine</i> [119-93-7]	(L)		Skin
102.	106.	<i>Triethanol amine</i> [102-71-6]	0.5 ppm, or 3.1 mg/m ³		
103.	107.	<i>Triethylene diamine</i> [280-57-9]	1 ppm, or 4.6 mg/m ³		Skin
104.	108.	<i>Triethylene tetramine</i> [112-24-3]	0.5 ppm, or 3 mg/m ³		Skin

Table 1

Regulation 833
Control of Exposure to Biological or Chemical Agents

105.	109.	Trimethoxy vinylsilane [2768-02-7]		10 ppm, or 60 mg/m ³	
106.	75.	Trixylyl phosphate [25155-23-1]	0.1 mg/m ³		
107.	20.	*Vinyl chloride [75-01-04]	1 ppm		
108.	80.	Wheat flour dust (total dust)	3 mg/m ³		
109a.	78a.	Wood dust – Certain hardwoods as beech and oak	1 mg/m ³		
109b.	78b.	Wood dust – Softwood	5 mg/m ³	10 mg/m ³	

Endnotes and Abbreviations:

* Denotes a chemical agent listed in Table 1 of Ontario Regulation 490/09 (Designated Substances) made under the Act. See clause 2 (2) (a) of this Regulation.

¹ Means the benzene soluble fraction of total particulate matter of the substances emitted into the atmosphere from metallurgical coke ovens including condensed vapours and solid particulates.

²As sum of components assayed by chromatographic procedure with reference to the bulk sample.

[CAS No.] - CAS Registry Number.

f/cc - Fibres per cubic centimetre of air.

mg/m³- Milligrams of the agent per cubic metre of air.

ppm - Parts of the agent per million parts of air by volume.

Skin - Danger of cutaneous absorption.

(E) The value is for particulate matter containing no asbestos and < 1 per cent crystalline silica.

(F) Respirable fibres: length >5µm; aspect ratio ≥3:1, as determined by the membrane filter method at 400-450 times magnification (4-mm objective), using phase-contrast illumination.

(H) Aerosol only.

(I) Inhalable fraction: means that size fraction of the airborne particulate

deposited anywhere in the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the ACGIH particle size-selective sampling criteria for airborne particulate matter; and (b) has the cut point of 100 μm at 50 per cent collection efficiency.

(K) Should not exceed 2 mg/m^3 respirable particulate mass.

(L) Exposure by all routes should be carefully controlled to levels as low as possible.

(R) Respirable fraction: means that size fraction of the airborne particulate deposited in the gas-exchange region of the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the ACGIH particle size-selective sampling criteria for airborne particulate matter; and (b) has the cut point of 4 μm at 50 per cent collection efficiency.

(V) Vapour and aerosol.

(a) Provided that the total dust contains less than 0.7 per cent vanadium.

(b) For assessing the visibility in a work environment where 1,2-propylene glycol aerosol is present.

(c) A secondary limit of 5 mg/m^3 (total dust) is recommended to deal with dusty operations where fibre counts are usually difficult to determine. Where both types of measurements are made simultaneously, the more restrictive limit should be used to assess the exposures.

O. Reg. 274/14, s. 2.

SCHEDULE REVOKED: O. Reg. 491/09, s. 8.

SCHEDULE 1 AIRBORNE MEASUREMENT AND CALCULATION OF EXPOSURE

1. Airborne concentrations of a biological or chemical agent are expressed as,

- (a) parts of the agent per million parts of air by volume (ppm);
- (b) milligrams of the agent per cubic metre of air (mg/m^3); or
- (c) fibres per cubic centimetre of air (f/cc).

2. In determining exposure to airborne concentrations of the biological or chemical agent, no regard shall be had to the wearing or using of a respirator.

3. Air sampling of the airborne concentrations of the biological or chemical agent is not required for the full period of a work day or a work week if the air sampling is representative of airborne concentrations of

the agent likely to be present during the full period.

4. The average concentrations of a biological or chemical agent to which a worker is exposed shall be determined from analysis of air samples taken as being representative of the exposure of the worker to the biological or chemical agent during work operations.

5. Subject to section 6 of this Schedule, the time-weighted average exposure to an airborne biological or chemical agent in a work day or work week shall be calculated as follows:

1. The cumulative daily or weekly exposure shall be calculated using the following formula:

$$C_1T_1 + C_2T_2 + \dots + C_nT_n$$

where,

C_1 is the concentration found in an air sample, and

T_1 is the total time in hours to which the worker is taken to be exposed to concentration C_1 in a work day or a work week.

2. The time-weighted average exposure shall be calculated by dividing the cumulative daily exposure by eight and the cumulative weekly exposure by 40 respectively.

6. A determination of time-weighted average exposure for extended work shifts may be calculated using the methodology set out in the Guide for the Adjustment of Permissible Exposure Values for Unusual Work Schedules (March 2015) published by Quebec's Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST), using the applicable TWA set out in the Ontario Table or the ACGIH Table.

7. Short-term exposures to the biological or chemical agent in any 15-minute period are determined from a single sample or from a time-weighted average of sequential samples taken during that period.

8. For mixtures of airborne chemical agents that exert an additive health effect, if analytical results of individual airborne agents are available, the following formula shall be used, subject to section 9 of this Schedule:

$$\frac{C_1}{L_1} + \frac{C_2}{L_2} + \dots + \frac{C_n}{L_n} = E$$

where,

$C_1, C_2, \dots, C_n$ are the concentrations of the individual agents found in the air sample,

$L_1, L_2, \dots, L_n$ are the respective exposure limits for the agents determined in accordance with the rules set out in section 4 of the Regulation,

and the sum of these ratios, E , shall not exceed 1.

9. If the agents in a mixture of airborne chemical agents have substantially different health effects,

- (a) section 8 of this Schedule does not apply, and
- (b) exposure to each agent shall be calculated independently.

O. Reg. 185/19, s. 7.

SCHEDULE 2 ASSIGNED PROTECTION FACTOR FOR RESPIRATORS

Type of Respirator	Assigned Protection Factor
Air-Purifying Respirator – filtering-facepiece	10
Air-Purifying Respirator – half-facepiece	10
Air- Purifying Respirator – full-facepiece	50
Powered Air-Purifying Respirator – half-facepiece	50
Powered Air-Purifying Respirator – full-facepiece	1,000
Powered Air-Purifying Respirator – helmet/hood	25 1,000 if supported by an SWPF study
Powered Air-Purifying Respirator – loose-fitting facepiece/visor	25
Airline Respirator – continuous- flow half-facepiece	50
Airline Respirator – continuous- flow full-facepiece	1,000

Airline Respirator – continuous-flow helmet/hood	25 1,000 if supported by an SWPF study
Airline Respirator – continuous-flow loose-fitting facepiece/visor	25
Airline Respirator – pressure-demand half-facepiece	50
Airline Respirator – pressure-demand full-facepiece	1000
Self-Contained Breathing Apparatus (SCBA) – pressure-demand full-facepiece	10,000
Multi-functional SCBA/Airline Respirator	10,000

O. Reg. 185/19, s. 8.

REGULATION 632/05 – CONFINED SPACES

ONTARIO REGULATION 632/05**CONFINED SPACES**

Consolidation Period: July 1, 2016 to the e-Laws currency date.

Last amendment: 346/15.

This is the English version of a bilingual regulation.

Definitions

1. In this Regulation,

"acceptable atmospheric levels" means that,

- (a) the atmospheric concentration of any explosive or flammable gas or vapour is less than,
 - (i) 25 per cent of its lower explosive limit, if paragraph 1 of subsection 19 (4) applies,
 - (ii) 10 per cent of its lower explosive limit, if paragraph 2 of subsection 19 (4) applies,
 - (iii) 5 per cent of its lower explosive limit, if paragraph 3 of subsection 19 (4) applies,
- (b) the oxygen content of the atmosphere is at least 19.5 per cent but not more than 23 per cent by volume,
- (c) in the case of a workplace that is not a project, the exposure to atmospheric contaminants does not exceed any applicable limit set out in Regulation 833 of the Revised Regulations of Ontario, 1990 (Control of Exposure to Biological or Chemical Agents) made under the Act or Ontario Regulation 490/09 (Designated Substances) made under the Act, and
- (d) in the case of a workplace that is a project, the exposure to atmospheric contaminants does not exceed any applicable limit set out in Regulation 833 of the Revised Regulations of Ontario, 1990 (Control of Exposure to Biological or Chemical Agents) made under the Act; ("niveaux atmosphériques acceptables")

"adequate", when used in relation to a procedure, plan, material, device, object or thing, means that it is,

- (a) sufficient for both its intended and its actual use, and
- (b) sufficient to protect a worker from occupational illness or

occupational injury; ("adéquat")

"adequately" has a meaning that corresponds to the meaning of "adequate"; ("adéquatement")

"assessment" means an assessment of hazards with respect to one or more confined spaces in a workplace, as described in section 6; ("évaluation")

"atmospheric hazards" means,

- (a) the accumulation of flammable, combustible or explosive agents,
- (b) an oxygen content in the atmosphere that is less than 19.5 per cent or more than 23 per cent by volume, or
- (c) the accumulation of atmospheric contaminants, including gases, vapours, fumes, dusts or mists, that could,
 - (i) result in acute health effects that pose an immediate threat to life, or
 - (ii) interfere with a person's ability to escape unaided from a confined space; ("risque atmosphérique")

"cold work" means work that is not capable of producing a source of ignition; ("travail à froid")

"confined space" means a fully or partially enclosed space,

- (a) that is not both designed and constructed for continuous human occupancy, and
- (b) in which atmospheric hazards may occur because of its construction, location or contents or because of work that is done in it; ("espace clos")

"emergency work" means work performed in connection with an unforeseen event that involves an imminent danger to the life, health or safety of any person; ("travail d'urgence")

"hot work" means work that is capable of producing a source of ignition; ("travail à chaud")

"lead employer" means an employer who contracts for the services of one or more other employers or independent contractors in relation to one or more confined spaces that are located,

- (a) in the lead employer's own workplace, or
- (b) in another employer's workplace; ("employeur principal")

“plan” means a plan for one or more confined spaces in a workplace, as described in section 7; (“plan”)

“program” means a program for one or more confined spaces in a workplace, as described in section 5; (“programme”)

“purging” means displacing contaminants from a confined space; (“purge”)

“related work” means work that is performed near a confined space in direct support of work inside the confined space. (“travail connexe”)
O. Reg. 632/05, s. 1; O. Reg. 492/09, s. 1; O. Reg. 95/11, s. 1.

Application

2. Subject to section 3, this Regulation applies to all workplaces to which the *Occupational Health and Safety Act* applies. O. Reg. 632/05, s. 2.

Exceptions

3. (1) This Regulation does not apply to work performed underwater by a diver during a diving operation as defined in Ontario Regulation 629/94 (Diving Operations) made under the Act. O. Reg. 95/11, s. 2.

(2) Sections 4 to 7 and 9 to 21 of this Regulation do not apply to emergency work performed by,

(a) a firefighter as defined in subsection 1 (1) of the *Fire Protection and Prevention Act, 1997*; or

(b) a person who,

(i) holds a certificate under the *Technical Standards and Safety Act, 2000* designating him or her as a gas technician, and

(ii) is working under the direction of a fire department, as defined in the *Fire Protection and Prevention Act, 1997*. O. Reg. 632/05, s. 3 (2); O. Reg. 23/09, s. 1.

(3) A worker described in subsection (2) who performs emergency work shall be adequately protected by,

(a) personal protective equipment, clothing and devices provided by the worker’s employer;

(b) training under section 8 provided by that employer; and

(c) written procedures and other measures developed by that employer. O. Reg. 632/05, s. 3 (3).

Confined spaces with multi-employer involvement

4. (1) This section applies if the workers of more than one employer perform work in the same confined space or related work with respect to the same confined space. O. Reg. 632/05, s. 4 (1).

(2) Before any worker enters the confined space or begins related work with respect to the confined space, the lead employer or, in the case of a project, the constructor shall prepare a co-ordination document to ensure that the duties imposed on employers by sections 5 to 7, 9 to 12 and 14 to 20 are performed in a way that protects the health and safety of all workers who perform work in the confined space or related work with respect to the confined space. O. Reg. 632/05, s. 4 (2); O. Reg. 95/11, s. 3 (1).

(3) Without restricting the generality of subsection (2), in the case of a workplace that is not a project, the co-ordination document may provide for the performance of a duty or duties referred to in that subsection by one or more employers on behalf of one or more other employers with respect to some or all of the workers. O. Reg. 95/11, s. 3 (2).

(4) A copy of the co-ordination document shall be provided to,

- (a) each employer of workers who perform work in the same confined space or related work with respect to the same confined space;
- (b) in the case of a workplace that is not a project, the joint health and safety committee or health and safety representative, if any, for each employer of workers who perform work in the same confined space or related work with respect to the same confined space; and
- (c) in the case of a workplace that is a project, the joint health and safety committee or health and safety representative, if any, for the project. O. Reg. 95/11, s. 3 (3).

Program

5. (1) If a workplace includes a confined space that workers may enter to perform work, the employer shall ensure that a written program for the confined space is developed and maintained in accordance with this Regulation before a worker enters the confined space. O. Reg. 95/11, s. 4.

(2) A program described in subsection (1) may apply to one or more confined spaces. O. Reg. 95/11, s. 4.

(3) In the case of a workplace that is not a project, the program described in subsection (1) shall be developed and maintained in consultation with the joint health and safety committee or the health and

safety representative, if any. O. Reg. 95/11, s. 4.

(4) A program described in subsection (1) shall be adequate and shall provide for,

- (a) a method for recognizing each confined space to which the program applies;
- (b) a method for assessing the hazards to which workers may be exposed, in accordance with section 6;
- (c) a method for the development of one or more plans, in accordance with section 7;
- (d) a method for the training of workers, in accordance with section 8 or section 9.1, as the case may be; and
- (e) an entry permit system that sets out the measures and procedures to be followed when work is to be performed in a confined space to which the program applies. O. Reg. 95/11, s. 4.

(5) In the case of a workplace that is not a project, the employer shall provide a copy of the program to the joint health and safety committee or the health and safety representative, if any. O. Reg. 95/11, s. 4.

(6) In the case of a workplace that is a project, the employer shall provide a copy of the program to the constructor, who shall provide a copy of it to the project's joint health and safety committee or the health and safety representative, if any. O. Reg. 95/11, s. 4.

(7) The employer or constructor, as the case may be, shall ensure that a copy of the program is available to,

- (a) any other employer of workers who perform work to which the program relates; and
- (b) every worker who performs work to which the program relates, if the workplace has no joint health and safety committee or health and safety representative. O. Reg. 95/11, s. 4.

Assessment

6. (1) Before any worker enters a confined space, the employer shall ensure that an adequate assessment of the hazards related to the confined space has been carried out. O. Reg. 632/05, s. 6 (1).

(2) The assessment shall be recorded in writing and shall consider, with respect to each confined space,

- (a) the hazards that may exist due to the design, construction, location, use or contents of the confined space; and

- (b) the hazards that may develop while work is done inside the confined space. O. Reg. 632/05, s. 6 (2).
- (3) The record of the assessment may be incorporated into an entry permit under section 10. O. Reg. 632/05, s. 6 (3).
- (4) If two or more confined spaces are of similar construction and present the same hazards, their assessments may be recorded in a single document, but each confined space shall be clearly identified in the assessment. O. Reg. 632/05, s. 6 (4).
- (5) The employer shall appoint a person with adequate knowledge, training and experience to carry out the assessment and shall maintain a record containing details of the person's knowledge, training and experience. O. Reg. 632/05, s. 6 (5).
- (6) The assessment shall contain the name of the person who carries out the assessment. O. Reg. 632/05, s. 6 (6).
- (7) The person shall sign and date the assessment and provide it to the employer. O. Reg. 632/05, s. 6 (7).
- (8) On request, the employer shall provide copies of the assessment and of the record mentioned in subsection (5) to,
 - (a) the joint health and safety committee or the project's joint health and safety committee, as the case may be, or the health and safety representative, if any; or
 - (b) every worker who performs work to which the assessment relates, if the workplace has no joint health and safety committee or health and safety representative. O. Reg. 632/05, s. 6 (8); O. Reg. 95/11, s. 5.
- (9) The employer shall ensure that the assessment is reviewed as often as is necessary to ensure that the relevant plan remains adequate. O. Reg. 632/05, s. 6 (9).

Plan

- 7. (1) Before any worker enters a confined space, the employer shall ensure that an adequate written plan, including procedures for the control of hazards identified in the assessment, has been developed and implemented by a competent person for the confined space. O. Reg. 632/05, s. 7 (1).
- (2) The plan may be incorporated into an entry permit under section 10. O. Reg. 632/05, s. 7 (2).
- (3) The plan shall contain provisions for,

- (a) the duties of workers;
- (b) co-ordination in accordance with section 4, if applicable;
- (c) on-site rescue procedures, in accordance with section 11;
- (d) rescue equipment and methods of communication, in accordance with section 12;
- (e) personal protective equipment, clothing and devices, in accordance with section 13;
- (f) isolation of energy and control of materials movement, in accordance with section 14;
- (g) attendants, in accordance with section 15;
- (h) adequate means for entering and exiting, in accordance with section 16;
- (i) atmospheric testing, in accordance with section 18;
- (j) adequate procedures for working in the presence of explosive or flammable substances, in accordance with section 19; and
- (k) ventilation and purging, in accordance with section 20. O. Reg. 632/05, s. 7 (3).

(4) One plan may deal with two or more confined spaces that are of similar construction and present the same hazards as identified by the assessment. O. Reg. 632/05, s. 7 (4).

(5) The employer shall ensure that the plan is reviewed as often as is necessary to ensure that it remains adequate. O. Reg. 632/05, s. 7 (5).

Hazard recognition and other general training — workplaces other than projects

8. (0.1) This section does not apply to workplaces that are projects. O. Reg. 95/11, s. 6.

(1) Every worker who enters a confined space or who performs related work shall be given adequate training for safe work practices for working in confined spaces and for performing related work, including training in the recognition of hazards associated with confined spaces. O. Reg. 632/05, s. 8 (1).

(2) The employer shall appoint a person with adequate knowledge, training and experience to conduct the training. O. Reg. 632/05, s. 8 (2).

(3) The employer shall ensure that training under this section is developed in consultation with the joint health and safety committee or

the health and safety representative, if any. O. Reg. 632/05, s. 8 (3).

(4) The employer shall ensure that training under this section is reviewed, in consultation with the joint health and safety committee or the health and safety representative, if any, whenever there is a change in circumstances that may affect the safety of a worker who enters a confined space in the workplace, and in any case at least once annually. O. Reg. 632/05, s. 8 (4).

(5) The employer shall maintain up-to-date written records showing who provided and who received training under this section, the nature of the training and the date when it was provided. O. Reg. 632/05, s. 8 (5).

(6) The records may be incorporated into an entry permit under section 10. O. Reg. 632/05, s. 8 (6).

(7) Training under this section may be combined with training under section 9. O. Reg. 632/05, s. 8 (7).

Plan-specific training — workplaces other than projects

9. (0.1) This section does not apply to workplaces that are projects. O. Reg. 95/11, s. 7.

(1) The employer shall ensure that every worker who enters a confined space or who performs related work,

(a) receives adequate training, in accordance with the relevant plan, to work safely and properly; and

(b) follows the plan. O. Reg. 632/05, s. 9 (1).

(2) The employer shall maintain up-to-date written records showing who provided and who received training under this section, and the date when it was provided. O. Reg. 632/05, s. 9 (2).

(3) The records may be incorporated into an entry permit under section 10. O. Reg. 632/05, s. 9 (3).

(4) Training under this section may be combined with training under section 8. O. Reg. 632/05, s. 9 (4).

Training — projects

9.1 (1) 'This section applies only to workplaces that are projects. O. Reg. 95/11, s. 8.

(2) The employer shall ensure that every worker who enters a confined space or who performs related work receives adequate training to perform the work safely, in accordance with the relevant plan. O. Reg. 95/11, s. 8.

- (3) Training under subsection (2) shall include training in,
 - (a) the recognition of hazards associated with confined spaces; and
 - (b) safe work practices for working in confined spaces and for performing related work. O. Reg. 95/11, s. 8.
- (4) The employer shall maintain up-to-date written records showing who provided and who received training under this section and the date when it was provided. O. Reg. 95/11, s. 8.
- (5) The employer shall provide the training records under subsection (4) to the project's joint health and safety committee or health and safety representative, if any, on request. O. Reg. 95/11, s. 8.
- (6) The records may be incorporated into an entry permit under section 10. O. Reg. 95/11, s. 8.

Entry permits

10. (1) The employer shall ensure that a separate entry permit is issued each time work is to be performed in a confined space, before any worker enters the confined space. O. Reg. 632/05, s. 10 (1).

(2) An entry permit shall be adequate and shall include at least the following:

- 1. The location of the confined space.
- 2. A description of the work to be performed there.
- 3. A description of the hazards and the corresponding control measures.
- 4. The time period for which the entry permit applies.
- 5. The name of the attendant described in section 15.
- 6. A record of each worker's entries and exits.
- 7. A list of the equipment required for entry and rescue, and verification that the equipment is in good working order.
- 8. Results obtained in atmospheric testing under section 18.
- 9. If the work to be performed in the confined space includes hot work, adequate provisions for the hot work and corresponding control measures. O. Reg. 632/05, s. 10 (2).
- (3) Before each shift, a competent person shall verify that the entry permit complies with the relevant plan. O. Reg. 632/05, s. 10 (3).
- (4) The employer shall ensure that the entry permit, during the time

period for which it applies, is readily available to every person who enters the confined space and to every person who performs related work with respect to the confined space. O. Reg. 632/05, s. 10 (4).

On-site rescue procedures

11. (1) The employer shall ensure that no worker enters or remains in a confined space unless, in accordance with the relevant plan, adequate written on-site rescue procedures that apply to the confined space have been developed and are ready for immediate implementation. O. Reg. 632/05, s. 11 (1).

(2) Before a worker enters a confined space, the employer shall ensure that an adequate number of persons trained in the matters listed in subsection (3) are available for immediate implementation of the on-site rescue procedures mentioned in subsection (1). O. Reg. 632/05, s. 11 (2).

(3) The persons shall be trained in,

- (a) the on-site rescue procedures mentioned in subsection (1);
- (b) first aid and cardio-pulmonary resuscitation; and
- (c) the use of the rescue equipment required in accordance with the relevant plan. O. Reg. 632/05, s. 11 (3).

Rescue equipment and methods of communication

12. (1) The employer shall ensure that the rescue equipment identified in the relevant plan is,

- (a) readily available to effect a rescue in the confined space;
- (b) appropriate for entry into the confined space; and
- (c) inspected as often as is necessary to ensure it is in good working order, by a person with adequate knowledge, training and experience who is appointed by the employer. O. Reg. 632/05, s. 12 (1).

(2) The inspection under clause (1) (c) shall be recorded in writing by the person, and the record of the inspection may be incorporated into the entry permit under section 10. O. Reg. 632/05, s. 12 (2).

(3) The employer shall establish methods of communication that are appropriate for the hazards identified in the relevant assessment, and shall make them readily available for workers to communicate with the attendant described in section 15. O. Reg. 632/05, s. 12 (3).

Personal protective equipment, clothing and devices

13. The employer shall ensure that each worker who enters a confined space is provided with adequate personal protective equipment, clothing and devices, in accordance with the relevant plan. O. Reg. 632/05, s. 13.

Isolation of energy and control of materials movement

14. The employer shall, in accordance with the relevant plan, ensure that each worker entering a confined space is adequately protected,

- (a) against the release of hazardous substances into the confined space,
 - (i) by blanking or disconnecting piping, or
 - (ii) if compliance with subclause (i) is not practical in the circumstances for technical reasons, by other adequate means;
- (b) against contact with electrical energy inside the confined space that could endanger the worker,
 - (i) by disconnecting, de-energizing, locking out and tagging the source of electrical energy, or
 - (ii) if compliance with subclause (i) is not practical in the circumstances for technical reasons, by other adequate means;
- (c) against contact with moving parts of equipment inside the confined space that could endanger the worker,
 - (i) by disconnecting the equipment from its power source, de-energizing the equipment, locking it out and tagging it, or
 - (ii) if compliance with subclause (i) is not practical in the circumstances for technical reasons, by immobilizing the equipment by blocking or other adequate means; and
- (d) against drowning, engulfment, entrapment, suffocation and other hazards from free-flowing material, by adequate means. O. Reg. 632/05, s. 14; O. Reg. 23/09, s. 2.

Attendant

15. (1) Whenever a worker is to enter a confined space, the employer shall ensure that an attendant,

- (a) is assigned;

- (b) is stationed outside and near,
 - (i) the entrance to the confined space, or
 - (ii) if there are two or more entrances, the one that will best allow the attendant to perform his or her duties under subsection (2);
- (c) is in constant communication with all workers inside the confined space, using the means of communication described in the relevant plan; and
- (d) is provided with a device for summoning an adequate rescue response. O. Reg. 632/05, s. 15 (1).

(2) The attendant shall not enter the confined space at any time and shall, in accordance with the relevant plan,

- (a) monitor the safety of the worker inside;
- (b) provide assistance to him or her; and
- (c) summon an adequate rescue response if required. O. Reg. 632/05, s. 15 (2).

Means for entering and exiting

16. An adequate means for entering and exiting shall be provided for all workers who enter a confined space, in accordance with the relevant plan. O. Reg. 632/05, s. 16.

Preventing unauthorized entry

17. If there is a possibility of unauthorized entry into a confined space, the employer or, in the case of a project, the constructor shall ensure that each entrance to the confined space,

- (a) is adequately secured against unauthorized entry; or
- (b) has been provided with adequate barricades, adequate warning signs regarding unauthorized entry, or both. O. Reg. 632/05, s. 17; O. Reg. 95/11, s. 9.

Atmospheric testing

18. (1) The employer shall appoint a person with adequate knowledge, training and experience to perform adequate tests as often as necessary before and while a worker is in a confined space to ensure that acceptable atmospheric levels are maintained in the confined space in accordance with the relevant plan. O. Reg. 632/05, s. 18 (1).

(2) If the confined space has been both unoccupied and unattended, tests shall be performed before a worker enters or re-enters. O. Reg. 632/05, s. 18 (2).

(3) The person performing the tests shall use calibrated instruments that are in good working order and are appropriate for the hazards identified in the relevant assessment. O. Reg. 632/05, s. 18 (3).

(4) The employer shall ensure that the results of every sample of a test are recorded, subject to subsection (5). O. Reg. 632/05, s. 18 (4).

(5) If the tests are performed using continuous monitoring, the employer shall ensure that test results are recorded at adequate intervals. O. Reg. 632/05, s. 18 (5).

(6) The tests shall be performed in a manner that does not endanger the health or safety of the person performing them. O. Reg. 632/05, s. 18 (6).

(7) In this section,

“sample” means an individual reading of the composition of the atmosphere in the confined space; (“prélèvement”)

“test” means a collection of samples. (“essai”) O. Reg. 632/05, s. 18 (7).

Explosive and flammable substances

19. (1) This section applies only in respect of atmospheric hazards described in clause (a) of the definition of “atmospheric hazards” in section 1. O. Reg. 632/05, s. 19 (1).

(2) The employer shall ensure that this section is complied with, by ventilation, purging, rendering the atmosphere inert or other adequate means, in accordance with the relevant plan. O. Reg. 632/05, s. 19 (2).

(3) The employer shall ensure that no worker enters or remains in a confined space that contains or is likely to contain an airborne combustible dust or mist whose atmospheric concentration may create a hazard of explosion. O. Reg. 632/05, s. 19 (3).

(4) The employer shall ensure that no worker enters or remains in a confined space that contains or is likely to contain an explosive or flammable gas or vapour, unless one of the following applies:

1. The worker is performing only inspection work that does not produce a source of ignition. In the case of an explosive or flammable gas or vapour, the atmospheric concentration is less than 25 per cent of its lower explosive limit, as determined by a combustible gas instrument.

2. The worker is performing only cold work. In the case of an explosive or flammable gas or vapour, the atmospheric concentration is less than 10 per cent of its lower explosive limit, as determined by a combustible gas instrument.
 3. The worker is performing hot work. All the following conditions are satisfied:
 - i. In the case of an explosive or flammable gas or vapour, the atmospheric concentration is less than 5 per cent of its lower explosive limit, as determined by a combustible gas instrument.
 - ii. The atmosphere in the confined space does not contain, and is not likely to contain while a worker is inside, an oxygen content greater than 23 per cent by volume.
 - iii. The atmosphere in the confined space is monitored continuously.
 - iv. The entry permit includes adequate provisions for hot work and corresponding control measures.
 - v. An adequate warning system and exit procedure are provided to ensure that workers have adequate warning and are able to exit the confined space safely if either or both of the following occur:
 - A. In the case of an explosive or flammable gas or vapour, the atmospheric concentration exceeds 5 per cent of its lower explosive limit.
 - B. The oxygen content of the atmosphere exceeds 23 per cent by volume. O. Reg. 632/05, s. 19 (4); O. Reg. 23/09, s. 3.
- (5) Subsections (3) and (4) do not apply if,
- (a) the atmosphere in the confined space,
 - (i) has been rendered inert by adding an inert gas, and
 - (ii) is monitored continuously to ensure that it remains inert; and
 - (b) a worker entering the confined space uses,
 - (i) adequate respiratory protective equipment,
 - (ii) adequate equipment to allow persons outside the confined space to locate and rescue the worker if necessary, and

(iii) such other equipment as is necessary to ensure the worker's safety. O. Reg. 632/05, s. 19 (5).

(6) The equipment mentioned in subclauses (5) (b) (i), (ii) and (iii) shall be inspected by a person with adequate knowledge, training and experience, appointed by the employer, and shall be in good working order before the worker enters the confined space. O. Reg. 632/05, s. 19 (6).

Ventilation and purging

20. (1) This section applies only in respect of atmospheric hazards described in clause (b) or (c) of the definition of "atmospheric hazards" in section 1. O. Reg. 632/05, s. 20 (1).

(2) If atmospheric hazards exist or are likely to exist in a confined space, the confined space shall be purged, ventilated or both, before any worker enters it, to ensure that acceptable atmospheric levels are maintained in the confined space while any worker is inside. O. Reg. 632/05, s. 20 (2).

(3) If mechanical ventilation is required to maintain acceptable atmospheric levels, an adequate warning system and exit procedure shall also be provided to ensure that workers have adequate warning of ventilation failure and are able to exit the confined space safely. O. Reg. 632/05, s. 20 (3).

(4) If compliance with subsection (2) is not practical in the circumstances for technical reasons,

(a) compliance with subsection (3) is not required; and

(b) a worker entering the confined space shall use,

(i) adequate respiratory protective equipment,

(ii) adequate equipment to allow persons outside the confined space to locate and rescue the worker if necessary, and

(iii) such other equipment as is necessary to ensure the worker's safety. O. Reg. 632/05, s. 20 (4).

(5) The equipment mentioned in subclauses (4) (b) (i), (ii) and (iii) shall be inspected by a person with adequate knowledge, training and experience, appointed by the employer, and shall be in good working order before the worker enters the confined space. O. Reg. 632/05, s. 20 (5).

Records

21. (1) In the case of a workplace that is not a project, the employer

shall retain every assessment, plan, co-ordination document under section 4, record of training under subsection 8 (5) or 9 (2), entry permit under section 10, record of an inspection under subsection 12 (2) and record of a test under section 18, including records of each sample, for the longer of the following periods:

1. One year after the document is created.
 2. The period that is necessary to ensure that at least the two most recent records of each kind that relate to a particular confined space are retained. O. Reg. 95/11, s. 10.
- (2) In the case of a workplace that is a project, the constructor or employer, as the case may be,
- (a) shall keep available for inspection at the project every assessment, plan, co-ordination document under section 4, record of training under subsection 9.1 (4), entry permit under section 10, record of an inspection under subsection 12 (2) and record of a test under section 18, including records of each sample; and
 - (b) shall retain the documents described in clause (a) for one year after the project is finished. O. Reg. 95/11, s. 10.
- (3) If section 4 applies,
- (a) the documents described in subsection (1) shall be retained by the employer responsible for creating them; and
 - (b) the documents described in clause (2) (a) shall be retained by the constructor or employer, as the case may be, responsible for creating them. O. Reg. 95/11, s. 10.
- 22.** OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THE ENGLISH VERSION OF THIS REGULATION). O. REG. 632/05, s. 22.

TABLE 1 REVOKED: O. Reg. 492/09, S. 2.

**REGULATION 67/93 – HEALTH CARE AND
RESIDENTIAL FACILITIES**

ONTARIO REGULATION 67/93**HEALTH CARE AND RESIDENTIAL FACILITIES**

Consolidation Period: From July 1, 2022 to the e-Laws currency date.

Last amendment: 369/22.

This is the English version of a bilingual regulation.

INTERPRETATION AND APPLICATION

1. In this Regulation,

“adequate”, when used in relation to a procedure, plan, material, device, object or thing, means that it is,

(a) sufficient for both its intended and its actual use, and

(b) sufficient to protect a worker from occupational illness or occupational injury; (“adéquat”)

“adequately” has a meaning that corresponds to the meaning of “adequate”; (“adéquatement”)

“patient or resident” means a person, including an out-patient, who is received, lodged in, admitted or registered at a facility for the purposes of being observed, examined, diagnosed or rehabilitated or for the purposes of receiving care or treatment; (“malade ou pensionnaire”)

“work surface” means a floor, platform or other surface used by a worker to stand or walk on in performing work and includes a surface on the premises of a facility used by a worker in performing work or in travelling to or from a work area. (“surface de travail”) O. Reg. 67/93, s. 1; O. Reg. 631/05, s. 1.

2. (1) This Regulation applies to the following types of facilities:

1. A hospital as defined in the *Public Hospitals Act*.
2. A laboratory or specimen collection centre as defined in the *Laboratory and Specimen Collection Centre Licensing Act*.
3. A private hospital as defined in the *Private Hospitals Act*.
4. A psychiatric facility as defined in the *Mental Health Act*.
5. A long-term care home as defined in the *Fixing Long-Term Care Act*, 2021.

6., 7. REVOKED: O. REG. 94/10, s. 1.

8. An intensive support residence or a supported group living residence as defined in the *Services and Supports to Promote the Social Inclusion of Persons with Developmental Disabilities Act, 2008*.

9. A facility where any of the following services, as set out in the definition of service in subsection 2 (1) of the Child, Youth and Family Services Act, 2017, is provided:

i. A service for a child with a developmental or physical disability or the child's family.

ii. A mental health service for a child or the child's family.

10. REVOKED: O. REG. 25/09, s. 1 (1).

11. Laundry facilities located in any of the facilities listed above.

12. A plant, as defined in Ontario Regulation 219/01 (Operating Engineers) made under the *Technical Standards and Safety Act, 2000*, that is operated primarily for one or more than one of the facilities listed above. O. Reg. 67/93, s. 2 (1); O. Reg. 25/09, s. 1; O. Reg. 94/10, s. 1; O. Reg. 169/11, s. 1; O. Reg. 174/18, s. 1.

(2) At a laundry facility to which this Regulation applies, if the regulations under the *Occupational Health and Safety Act* relating to industrial establishments conflict with this Regulation, this Regulation prevails unless the provision in that other regulation states that it is to prevail over this Regulation. O. Reg. 67/93, s. 2 (2).

3. In applying this Regulation, a measure or a procedure or the composition, design, size or arrangement of any physical object, device or thing may vary from that prescribed if,

(a) the variation affords protection for the health or safety of a worker equal to or greater than that prescribed by this Regulation; and

(b) notice of the variation is given to the joint health and safety committee, if any, and to the trade union, if any. O. Reg. 67/93, s. 3.

RETENTION OF REPORTS AND RECORDS

4. The employer shall keep on file all records or reports that are required to be kept under this Regulation for a period of at least one year or such longer period as is necessary to ensure that the two most recent reports or records are on file. O. Reg. 67/93, s. 4.

5.-6 REVOKED: O. Reg. 427/21, s.2

7. REVOKED: O. Reg. 59/18, s. 1.

GENERAL DUTY TO ESTABLISH MEASURES AND PROCEDURES

8. Every employer in consultation with the joint health and safety committee or health and safety representative, if any, and upon consideration of the recommendation thereof, shall develop, establish and put into effect measures and procedures for the health and safety of workers. O. Reg. 67/93, s. 8.

9. (1) The employer shall reduce the measures and procedures for the health and safety of workers established under section 8 to writing and such measures and procedures may deal with, but are not limited to, the following:

1. Safe work practices.
2. Safe working conditions.
3. Proper hygiene practices and the use of hygiene facilities.
4. The control of infections.
5. Immunization and inoculation against infectious diseases.
6. The use of appropriate antiseptics, disinfectants and decontaminants.
7. The hazards of biological, chemical and physical agents present in the workplace, including the hazards of dispensing or administering such agents.
8. Measures to protect workers from exposure to a biological, chemical or physical agent that is or may be a hazard to the reproductive capacity of a worker, the pregnancy of a worker or the nursing of a child of a worker.
9. The proper use, maintenance and operation of equipment.
10. The reporting of unsafe or defective devices, equipment or work surfaces.
11. The purchasing of equipment that is properly designed and constructed.
12. The use, wearing and care of personal protective equipment and its limitations.
13. The handling, cleaning and disposal of soiled linen, sharp objects

and waste.

(2) At least once a year the measures and procedures for the health and safety of workers shall be reviewed and revised in the light of current knowledge and practice.

(3) The review and revision of the measures and procedures shall be done more frequently than annually if,

- (a) the employer, on the advice of the joint health and safety committee or health and safety representative, if any, determines that such review and revision is necessary; or
- (b) there is a change in circumstances that may affect the health and safety of a worker.

(4) The employer, in consultation with and in consideration of the recommendation of the joint health and safety committee or health and safety representative, if any, shall develop, establish and provide training and educational programs in health and safety measures and procedures for workers that are relevant to the workers' work. O. Reg. 67/93, s. 9.

PERSONAL PROTECTIVE EQUIPMENT

10. (1) A worker who is required by his or her employer or by this Regulation to wear or use any protective clothing, equipment or device shall be instructed and trained in its care, use and limitations before wearing or using it for the first time and at regular intervals thereafter and the worker shall participate in such instruction and training.

(2) Personal protective equipment that is to be provided, worn or used shall,

- (a) be properly used and maintained;
- (b) be a proper fit;
- (c) be inspected for damage or deterioration; and
- (d) be stored in a convenient, clean and sanitary location when not in use. O. Reg. 67/93, s. 10.

11. If a worker is exposed,

- (a) to the hazard of head injury, the worker shall wear head protection appropriate in the circumstances;
- (b) to the hazard of eye injury, the worker shall wear eye protection appropriate in the circumstances;
- (c) to the hazard of foot injury, the worker shall wear foot protection

appropriate in the circumstances; and

- (d) to the hazard of slipping on a work surface, the worker shall wear footwear with slip-resistant soles. O. Reg. 67/93, s. 11.

12. If a worker has or wears long hair, loose clothing or jewellery that may present a hazard, it shall be suitably confined. O. Reg. 67/93, s. 12.

13. (1) Except where work is performed from a ladder, if a worker is exposed to the hazard of falling to a surface more than three metres below the position where the worker is situated, the worker shall be provided with and shall wear a fall arrest system.

(2) The fall arrest system shall consist of a serviceable safety belt or harness and lifeline that is adequately secured to a fixed support and so arranged that the worker cannot fall freely for a vertical distance of more than 1.5 metres.

(3) The fall arrest system shall,

- (a) have sufficient capacity to absorb twice the energy and twice the load that under the circumstances of its use may be transmitted to it; and
- (b) be equipped with a shock absorber or other device to limit the maximum arresting force to 8.0 kilonewtons to the worker. O. Reg. 67/93, s. 13.

14. (1) If a worker is exposed to the hazard of drowning and the liquid into which the worker could fall is of sufficient depth that a flotation device would be effective,

- (a) the worker shall be provided with and wear a flotation device appropriate in the circumstances;
- (b) an alarm system to warn workers that a rescue operation is to be carried out shall be provided;
- (c) appropriate rescue equipment including flotation devices, poles and ropes shall be available in proximity to the hazard for immediate use; and
- (d) a worker trained in cardio-pulmonary resuscitation shall be immediately available.

(2) Subsection (1) does not apply to a swimming pool or a pool used for therapeutic purposes. O. Reg. 67/93, s. 14.

15. (1) A worker who supports, positions or restrains a patient or resident during X-ray irradiation of the patient or resident shall be provided with and wear a protective apron and protective gloves and,

where appropriate, a protective collar.

(2) The equipment provided under subsection (1) shall have a lead equivalence of at least 0.5 millimetres. O. Reg. 67/93, s. 15.

PREMISES

16. A warning sign shall be posted on any door, corridor or stairway,

- (a) that is not a means of egress but that is located or arranged so that it could be mistaken for one; or
- (b) that leads to a hazardous, restricted or unsafe area. O. Reg. 67/93, s. 16.

17. Except where the door is in a fire separation, a self-closing door in a corridor used as a passageway for vehicles or wheeled equipment shall be equipped with a hold-open device and a see-through panel. O. Reg. 67/93, s. 17.

18. (1) This section applies with respect to a hazardous room,

- (a) with an area greater than fifteen square metres; or
- (b) requiring a distance of travel greater than 4.5 metres from any point in the room to an egress doorway.

(2) A hazardous room shall have at least two egress doorways that are at least three-quarters of the length of the diagonal distance of the room from each other.

(3) One egress doorway in a hazardous room shall be located within a maximum distance of twenty-five metres from any point in the room.

(4) A hazardous room shall be located in a floor area that has at least two exits.

(5) In this section,

“hazardous room” means a room containing a substance which, because of its nature or the form in which the substance exists, is handled or stored, may explode or become easily ignited causing a fire or creating an atmosphere or condition of imminent hazard to a worker. O. Reg. 67/93, s. 18.

VENTILATION

19. (1) General indoor ventilation adequate to protect the health and safety of a worker shall be provided by natural or mechanical means.

(2) A mechanical ventilation system shall be inspected every six months to ensure it is in good condition.

(3) The inspection referred to in subsection (2) shall be carried out by a person who is qualified by training and experience to make such an inspection.

(4) The person carrying out the inspection shall file a report on the inspection with the employer and with the joint health and safety committee or health and safety representative, if any.

(5) A mechanical ventilation system,

(a) shall be serviced and have maintenance work performed on it as frequently as recommended by the manufacturer; and

(b) shall be serviced, have maintenance work performed on it or be repaired when a report referred to in subsection (4) indicates it is necessary to ensure the system is maintained in good condition.
O. Reg. 67/93, s. 19.

20. (1) The ventilation system shall be such that replacement air is provided to replace air that is exhausted.

(2) The replacement air shall,

(a) be heated, when necessary, to maintain at least the minimum temperature in the workplace specified in subsection 21 (1);

(b) be free from contamination from any hazardous dust, vapour, smoke, fume, mist or gas; and

(c) enter in such a manner so as not to cause undue drafts and prevent,

(i) blowing of settled dust into the workplace, and

(ii) interference with any exhaust system.

(3) Air discharged from any exhaust system shall be discharged in such a manner so as to prevent the return of contaminants to any work area.
O. Reg. 67/93, s. 20.

HEATING

21. (1) Subject to subsections (2) and (3), an enclosed workplace shall be maintained at a temperature,

(a) that is suitable for the type of work performed;

(b) that is no less than 18 degrees Celsius; and

(c) that is not likely to cause physical stress because of heat.

(2) Clause (1) (b) does not apply to a workplace,

(a) that is normally unheated;

- (b) where materials requiring lower temperatures are used or stored, or a process or activity is carried out or performed requiring lower temperatures;
 - (c) where radiant heating is such that a worker working in the area has the degree of comfort that would result were the area heated to 18 degrees Celsius;
 - (d) where the work or activity is such that a temperature of 18 degrees Celsius could cause discomfort; or
 - (e) during the first hour of the main operating shift where heat from processing or equipment provides a substantial portion of the heating.
- (3) If it is not practical in the circumstances to maintain the temperature of an enclosed workplace as required by clause (1) (c), the employer shall, in consultation with the joint health and safety committee or health and safety representative, if any, develop, maintain and put into effect measures and procedures to ensure that a worker is not exposed to heat stress conditions that are likely to endanger or injure the worker. O. Reg. 67/93, s. 21.

LIGHTING

22. (1) A workplace shall be provided with illumination in accordance with the minimum lighting requirements as set out in Part 3 of the Ontario Building Code.

(2) The brightness levels and ratios, glare, contrast and shadows shall be maintained at a level that is not likely to be a hazard to a worker.

(3) Glare and reflection that are likely to be a hazard to a worker shall be limited as far as is practicable. O. Reg. 67/93, s. 22.

23. If a glare from a direct lighting source is likely to be a hazard to a worker, the source shall be shielded by louvres, lenses, lens covers or diffusers which control the glare. O. Reg. 67/93, s. 23.

24. If a worker is required to use a video display terminal for a continuous period of one hour or more, the worker shall have at least five minutes of time free from such work in every hour. O. Reg. 67/93, s. 24.

25. If fluorescent tubes are disposed of by crushing or compacting, it shall be done in an area adequately ventilated to protect the health and safety of the worker and the worker shall be provided with and use appropriate protective equipment. O. Reg. 67/93, s. 25.

26. Burned-out light bulbs and fluorescent tubes shall be promptly replaced with appropriate replacements to ensure the workplace is

provided with adequate illumination to perform the work safely. O. Reg. 67/93, s. 26.

27. Lighting equipment shall be serviced and maintained at regular intervals to ensure the workplace is provided with illumination in accordance with section 22. O. Reg. 67/93, s. 27.

HYGIENE FACILITIES

28. Toilets and washbasins for the use of workers shall,

- (a) be provided in accordance with the requirements for sanitary facilities as set out in Part 3 of the Ontario Building Code;
- (b) have hot and cold running water for the washbasins; and
- (c) have reasonable personal hygiene supplies and equipment, including soap and disposable towels. O. Reg. 67/93, s. 28.

29. (1) Potable drinking water shall be provided from a fountain with an upward jet or from a tap from a piped water supply or a covered vessel together with a supply of single-use cups in a sanitary container located near the tap.

(2) Potable drinking water shall be available,

- (a) on every floor where work is regularly performed; and
- (b) within 100 metres of any area where work is regularly performed. O. Reg. 67/93, s. 29.

30. (1) If ten or more workers are employed at a facility, a room or other space affording reasonable privacy shall be provided.

(2) The room shall be equipped with one or more cots and chairs, unless the facility has a first-aid station or infirmary room that is so equipped. O. Reg. 67/93, s. 30.

31. Refrigerators used to store cultures, specimens or biological ampules shall not be used to store food or drink. O. Reg. 67/93, s. 31.

32. No food, drink, tobacco or cosmetics shall be consumed, applied or kept in areas where infectious materials, hazardous chemicals or hazardous drugs are used, handled or stored. O. Reg. 67/93, s. 32.

WORK SURFACES

33. (1) A work surface shall be kept free of,

- (a) obstructions and hazards;
- (b) cracks, holes and bumps that may endanger a worker; and

(c) accumulations of refuse, snow and ice.

(2) A work surface shall not have any finish or protective material used on it that is likely to make the surface slippery.

(3) A worker who knows that the condition of a work surface fails to comply with subsection (1) or (2) shall report the failure to a supervisor.

(4) If a report of a failure to comply is made to a supervisor, he or she shall ensure that steps necessary to remedy the situation are taken forthwith, and until remedied, the hazard shall be identified by a conspicuous warning sign. O. Reg. 67/93, s. 33.

34. (1) If there is a spill of a liquid or material on a work surface that is likely to cause a worker to slip or fall, it shall be cleaned up forthwith and, until cleaned up, it shall be identified by a conspicuous warning sign.

(2) If a work surface is slippery when it is being cleaned or polished, a conspicuous sign warning that the surface is slippery shall be posted during cleaning or polishing. O. Reg. 67/93, s. 34.

35. If wet processes are used, or wet conditions are present, on a work surface and they cause it to be slippery, steps necessary to remedy the situation shall be taken including,

- (a) the use of non-slip work surfaces;
- (b) the provision of dry-standing places or non-slip mats;
- (c) the provision of drainage adequate in the circumstances; or
- (d) the use of water resistant, non-slip footwear by workers who may use the work surface. O. Reg. 67/93, s. 35.

36. (1) Subject to subsection (2), there shall be a guardrail,

- (a) around the perimeter of an uncovered opening in a floor, roof or other surface to which a worker has access;
 - (b) at an open side of,
 - (i) a raised floor, mezzanine, balcony, gallery, landing, platform, walkway, stile, ramp or other surface, and
 - (ii) a vat, bin or tank, the top of which is less than 107 centimetres above the surrounding floor, ground, platform or other surface; and
 - (c) around a machine, electrical installation, place or thing that is likely to endanger the safety of any worker.
- (2) Subsection (1) does not apply to,

- (a) a loading dock;
- (b) a pit used for maintenance of vehicles or similar equipment;
- (c) a roof to which access is required for maintenance purposes only;
- (d) a swimming pool or a pool used for therapeutic purposes; or
- (e) a stage in an auditorium or lecture theatre. O. Reg. 67/93, s. 36.

37. A guardrail shall be designed and constructed to meet the requirements for guardrails as set out in Parts 3 and 4 of the Ontario Building Code or it shall,

- (a) have a horizontal top rail located not less than ninety-one and not more than 107 centimetres above the surface to be guarded;
- (b) have an intermediate rail located midway between the top rail and the surface to be guarded;
- (c) if tools or other objects may fall on a worker, have a toe-board that extends from the surface to be guarded to a height of not less than 125 millimetres;
- (d) be constructed to meet the structural requirements for guardrails as set out in Part 4 of the Ontario Building Code; and
- (e) be free of splinters and other hazardous protrusions. O. Reg. 67/93, s. 37.

38. An opening in a work surface shall be covered or shall have a guardrail around its perimeter. O. Reg. 67/93, s. 38.

39. A cover on an opening in a work surface shall be secured in place and shall be constructed to meet the structural requirements for loads due to the use of floors and roofs as set out in Part 4 of the Ontario Building Code. O. Reg. 67/93, s. 39.

40. If frequent access is required to equipment that is elevated above or is located below a work surface, permanent platforms shall be provided with access by a fixed stair or a fixed access ladder. O. Reg. 67/93, s. 40.

41. (1) A fixed access ladder shall,

- (a) be vertical;
- (b) have rest platforms at not more than nine metre intervals;
- (c) be offset at each rest platform;
- (d) where the ladder extends more than five metres above grade, floor or landing, have a safety cage beginning not more than 2.2

metres above grade, floor or landing and continuing at least ninety centimetres above the top landing with openings to permit access by a worker to rest platforms or to the top landing;

- (e) have side rails that extend ninety centimetres above the landing; and
- (f) have rungs which are at least fifteen centimetres from the wall and spaced at regular intervals. O. Reg. 67/93, s. 41 (1); O. Reg. 25/09, s. 3.

(2) Subsection (1) does not apply to an access ladder on a tower, water tank, chimney or similar structure that has a safety device which will provide protection should a worker using the ladder fall. O. Reg. 67/93, s. 41 (2).

RESTRICTED SPACES

42. (1) In this section,

“restricted space” means a tank, vat, vessel, duct, vault, boiler or other space from which the egress of a worker is restricted, limited or impeded because of the construction, design, location or other physical characteristics of the space.

(2) A worker shall enter a restricted space only if,

- (a) he or she is informed of and familiar with the characteristics of the restricted space which restrict, limit or impede egress and is instructed in the procedures for entering, working in and exiting from the restricted space;
- (b) there are procedures and measures in place for the removal of the worker from the restricted space in the event of an emergency;
- (c) at least one other worker is stationed outside the restricted space and in proximity to it and is readily available and capable of implementing emergency procedures and measures for the removal of the worker from the restricted space; and
- (d) mechanical equipment in the restricted space is disconnected from its power source and is locked out.

(3) The requirements of subsection (2) apply with all necessary modifications while a worker is in a restricted space. O. Reg. 67/93, s. 42.

43.-43.19 REVOKED: O. REG. 97/11, s. 1.

EQUIPMENT

44. Machinery or equipment shall be,

- (a) suitable for its actual use;
- (b) constructed of materials of sufficient size and strength to withstand imposed stresses;
- (c) provided with locking devices in order to prevent accidental operation which may be a hazard to a worker;
- (d) placed on a surface that is capable of supporting it;
- (e) inspected immediately before its use and at regular intervals as recommended by the manufacturer;
- (f) serviced and maintained in accordance with the recommendations and instructions of the manufacturer;
- (g) operated by a worker trained in its use and function; and
- (h) stored in a manner that prevents its movement. O. Reg. 67/93, s. 44.

45. If a machine or prime mover or transmission equipment has an exposed moving part that may endanger the safety of any worker, it shall be equipped with and guarded by a guard or other device that prevents access to the moving part. O. Reg. 67/93, s. 45.

46. An in-running nip hazard or any part of a machine, device or thing that may endanger the safety of a worker shall be equipped with and guarded by a guard or other device that prevents access to the pinch point. O. Reg. 67/93, s. 46.

47. A machine shall be shielded or guarded so that the safety of a worker is not endangered by its product, the material being processed or its waste stock. O. Reg. 67/93, s. 47.

48. An emergency stop control on a power-driven machine shall be conspicuously identified and be located within easy reach of the operator. O. Reg. 67/93, s. 48.

49. (1) An operating control that acts as a guard for a machine that is not otherwise guarded shall,

- (a) be in a location where the safety of the operator is not endangered by moving machinery; and
- (b) be arranged so that it cannot be operated accidentally.

(2) An operating control that acts as a guard for a machine that is not otherwise guarded shall not be made ineffective by a tie-down device or other means. O. Reg. 67/93, s. 49.

50. (1) Subject to subsection (2), a worker shall repair, maintain or adjust a machine, transmission machinery, device or thing or a part thereof only if,

- (a) the control switches or other control mechanisms are locked out;
- (b) the moving parts are stopped; and
- (c) the hydraulic, pneumatic or gravity-stored energy is dissipated or contained.

(2) If it is not practical to de-energize a machine or transmission equipment by locking out its controls during repair, maintenance or adjustment, a worker may do such work if barriers, shields or other effective precautions are used or taken to ensure the safety of the worker while he or she is doing the work. O. Reg. 67/93, s. 50.

51. Clearance between a moving part of any machine or any material carried by the moving part of the machine and any other machine, structure or thing shall be adequate to ensure that the safety of any worker in the area is not endangered. O. Reg. 67/93, s. 51.

52. (1) Subject to subsection (3), if a worker is repairing or altering a gas line, steam line, pipeline, drum, tank or other container, the worker shall,

- (a) adjust its internal pressures to atmospheric pressure before any fastening is removed;
- (b) drain and clean it or otherwise render it free from any explosive, flammable or harmful substance.

(2) If a worker is repairing or altering a gas line, steam line, pipeline, drum, tank or other container, the worker shall not refill it while there is any risk of vaporizing or igniting the substance that is being placed in it.

(3) Subsection (1) does not apply if a competent person is hot-tapping and boxing-in a pipeline under controlled conditions so as to provide for the protection of all workers. O. Reg. 67/93, s. 52.

53. If machinery or equipment is being dismantled, serviced or repaired and the collapse of any part of it may injure a worker, blocking shall be installed to prevent its collapse. O. Reg. 67/93, s. 53.

54. If a worker may pass or work under machinery, equipment or material that is temporarily elevated, it shall be securely and solidly blocked to prevent it from falling or moving. O. Reg. 67/93, s. 54.

55. Before lifting or self-propelled mobile equipment is operated after its repair or modification, a person qualified by training and experience

to do so shall inspect it to ensure that it is in good condition and a record shall be kept of the inspection. O. Reg. 67/93, s. 55.

56. (1) Glassware used in a laboratory shall be inspected for chips and cracks before use.

(2) Chipped or cracked glassware shall not be used unless it is repaired to a condition that does not present a hazard to a worker and if not repaired it shall be placed in a puncture-resistant container for disposal as waste. O. Reg. 67/93, s. 56.

57. A grinding wheel shall be,

- (a) marked with the maximum speed at which it may be operated;
- (b) checked for any defect before it is mounted;
- (c) mounted in accordance with the manufacturer's specifications;
- (d) provided with protective hoods that enclose the wheel as closely as the work will permit;
- (e) operated only by a worker using eye protection;
- (f) operated at a speed which does not exceed the manufacturer's recommendations; and
- (g) stored where it will not be subjected to heat, cold or impact which may damage it. O. Reg. 67/93, s. 57.

58. A work rest used with a grinding wheel shall,

- (a) be in a position above the centre line of the grinding wheel;
- (b) have a maximum clearance of three millimetres from the grinding wheel; and
- (c) be adjusted only when the grinding wheel is stationary. O. Reg. 67/93, s. 58.

59. (1) A centrifuge shall be maintained and operated in accordance with the recommendations and instructions of its manufacturer.

(2) A centrifuge shall be designed or equipped with a device to prevent it from being operated at a speed in excess of that for which it was designed and intended.

(3) The load in a centrifuge shall be balanced to minimize vibration during its operation.

(4) If a flammable or infectious material is being centrifuged, a legible sign warning of the hazard shall be posted in the area where the centrifuge

is being operated.

(5) If a bench-model centrifuge is being used to centrifuge a flammable or infectious material, it shall be operated in a biological safety cabinet or be otherwise appropriately contained, unless sealed safety heads or sealed centrifugal caps are used.

(6) Cushions shall be used in centrifuging material that is in glass containers. O. Reg. 67/93, s. 59.

60. (1) An autoclave or sterilization machine shall,

- (a) if the sterilant used in it is ethylene oxide or another hazardous chemical, be vented to the outdoors;
- (b) be operated by a worker qualified by training and experience to do so;
- (c) have its operating and emergency instructions posted adjacent to it;
- (d) be maintained on a regular basis and be inspected at least once every three months;
- (e) be tested when first put into service and annually thereafter by a person qualified by training and experience to do so and a record of the test shall be kept; and
- (f) have a pressure relief valve set at a pressure not exceeding that for which it was designed and intended.

(2) After its operation or use, an autoclave or sterilization machine shall not be opened until its pressure has returned to atmospheric pressure. O. Reg. 67/93, s. 60.

61. (1) Subject to subsection (2), a worker who is loading or unloading an autoclave or sterilization machine shall be provided with and wear aprons and elbow-length insulated gloves of an impervious material.

(2) If the autoclave or sterilization machine does not use heat, the gloves are not required to be insulated. O. Reg. 67/93, s. 61.

ELECTRICAL EQUIPMENT

62. Electrical equipment, power lines, conductors and insulating materials shall,

- (a) be suitable for their use;
- (b) be certified by the Canadian Standards Association or by the Electrical Safety Authority, as defined in the *Electricity Act*, 1998;

and

- (c) be installed, maintained, modified and operated in such a manner as not to present a hazard to a worker. O. Reg. 67/93, s. 62; O. Reg. 142/99, s. 1.

63. Except where electrical work is being carried out as permitted by section 68, tools, ladders, scaffolding and other equipment or materials capable of conducting electricity shall not be stored, used or left close enough to any energized electrical installation such that they may make electrical contact with an energized conductor. O. Reg. 67/93, s. 63.

64. No person, other than a person authorized to do so by the supervisor in charge of the room or enclosure, shall enter or be permitted to enter a room or other enclosure that contains exposed energized electrical parts. O. Reg. 67/93, s. 64.

65. The entrance to a room or other enclosure containing exposed energized electrical parts shall be marked by conspicuous signs warning of the danger and stating that entry by unauthorized persons is prohibited. O. Reg. 67/93, s. 65.

66. (1) The power supply to electrical installations, equipment or power lines shall be disconnected, locked out of service and tagged before any work is done, and while any work is being done, on or near the installations, equipment or power lines.

(2) Locking out and tagging are not required,

(a) if the power lines are adequately grounded with a visible grounding mechanism; or

(b) if the voltage is less than 300 volts and there is no locking device for the circuit breakers or fuses and procedures are in place adequate to ensure that the circuit is not inadvertently energized.

(3) Before beginning the work, each worker shall determine if the power supply is disconnected.

(4) If locking out and tagging are not required, the employer shall ensure that the procedures set out in clause (2) (b) are carried out.

(5) This section does not apply if it is not practicable to disconnect electrical installations, equipment or power lines from the power supply before working on, or near, the installations, equipment or power lines. O. Reg. 67/93, s. 66.

67. A tag required by subsection 66 (1) shall,

(a) be made of non-conducting material;

- (b) be secured to prevent its inadvertent removal;
- (c) be placed in a conspicuous location;
- (d) state the reason the switch is opened;
- (e) show the name of the person responsible for opening the switch; and
- (f) show the date and time on which the switch was opened. O. Reg. 67/93, s. 67.

68. (1) This section applies if it is not practicable to disconnect electrical installations, equipment or power lines from the power supply before working on, or near, the installations, equipment or power lines. O. Reg. 67/93, s. 68 (1).

(2) Only a competent person shall perform the work. O. Reg. 67/93, s. 68 (2).

(3) The worker shall use rubber gloves, mats, shields, electrical shock resistant footwear or other protective equipment and procedures adequate to ensure protection from electrical shocks and burns while performing the work. O. Reg. 67/93, s. 68 (3).

(4) If the installation, equipment or power line is operating at 300 volts or over but less than 750 volts, a suitably equipped, competent person who is able to perform rescue operations, including cardio-pulmonary resuscitation, shall be readily available and be able to see the worker who is performing the work. O. Reg. 67/93, s. 68 (4).

(5) If the installation, equipment or power line is operating at 750 volts or over,

- (a) the work shall be carried out by a competent person under the authority of an electrical utility; and
- (b) a suitably equipped, competent person who is able to perform rescue operations, including cardio-pulmonary resuscitation, shall be readily available and be able to see the worker who is performing the work. O. Reg. 67/93, s. 68 (5).

(6) Subsections (4) and (5) do not apply to troubleshooting, installing or replacing meters or to the testing of appliances or instruments by,

- (a) a worker who holds a certificate of qualification or a provisional certificate of qualification issued under the Building Opportunities in the Skilled Trades Act, 2021, that is not suspended, in the trade of,

(i) electrician – construction and maintenance, or

(ii) electrician – domestic and rural, if the worker is performing work that is limited to the scope of practice for that trade; or

(b) a person with equivalent qualifications by training or experience.
O. Reg. 89/13, s. 1.

69. Cord-connected electrical equipment and tools shall be adequately grounded. O. Reg. 67/93, s. 69.

70. (1) When used outdoors or in wet locations, portable electrical tools shall be protected by a ground fault circuit interrupter installed at the receptacle or on the circuit at the electrical panel.

(2) If there is an indication of a ground fault, it shall be investigated and removed without delay. O. Reg. 67/93, s. 70.

71. Electrical equipment or power lines that are no longer used for the purpose for which they were intended or designed shall be isolated, de-energized and,

(a) removed; or

(b) left in place and locked out and permanently disconnected by removing the cables from their connections at both ends and cutting back or taping the cables. O. Reg. 67/93, s. 71.

72. (1) No object shall be brought closer to an energized electric conductor of the voltage set out in Column 1 of the following Table than the distance specified opposite to it in Column 2:

TABLE

Column 1	Column 2
Conductor Voltage	Minimum Distance
750 to 150,000 volts	3 metres
over 150,000 to 250,000 volts	4.5 metres
over 250,000 volts	6 metres

O. Reg. 67/93, s. 72 (1).

(2) Subsection (1) does not apply,

(a) if mats, shields or other protective devices adequate to ensure protection from electrical shocks and burns are installed under the authority of the owner of the conductor; and

(b) if the person who is responsible for bringing the object within the minimum distance is using procedures adequate to ensure protection from electrical shock and burns and is,

(i) a worker who holds a certificate of qualification or a provisional

certificate of qualification issued under the Building Opportunities in the Skilled Trades Act, 2021, that is not suspended, in the trade of,

(A) electrician – construction and maintenance, or

(B) electrician – domestic and rural, if the worker is performing work that is limited to the scope of practice for that trade, or

(ii) a person with equivalent qualifications by training or experience.

O. Reg. 67/93, s. 72 (2); O. Reg. 25/09, s. 8; O. Reg. 89/13, s. 2.

73. If a vehicle, crane or similar equipment is operated near a live power line and it is possible for any part of it or its load to make contact with the live power line,

(a) a worker shall be stationed within view of the operator to warn him or her when any part of the equipment is approaching the minimum distance from the live power line; and

(b) clearance shall be allowed for any changes in boom angle and for any swing of the hoisting cable and load. O. Reg. 67/93, s. 73.

COMPRESSED GAS CYLINDERS

74. (1) A storage cylinder for compressed gas shall,

(a) have a valve connection which prevents an inadvertent connection that would result in a hazardous mixture of gases;

(b) be secured in position during transportation, storage or use;

(c) not be rolled, slid or dropped;

(d) if designed for the use of a valve protection cap, have the valve protection cap in position when the cylinder is being transported or stored;

(e) if it contains acetylene, be in an upright position;

(f) be protected from physical damage;

(g) if it is empty, be labelled accordingly and have the valve securely turned off; and

(h) be stored in a well-ventilated area, away from any source of ignition.

(2) Subsection (1) does not apply to fire extinguishers or calibration equipment.

- (3) A cylinder containing compressed flammable gas shall be stored,
 - (a) at least six metres from any cylinder containing oxygen; or
 - (b) with a barrier of noncombustible material at least 1.5 metres high having a fire resistance rating of at least one-half hour separating it from any cylinder containing oxygen.
- (4) The area where compressed gas cylinders are stored shall be posted as a no smoking area and no person shall smoke in the area. O. Reg. 67/93, s. 74.

MATERIAL HANDLING EQUIPMENT

75. In sections 76 through 79, “material handling equipment” and “lifting equipment” do not include,

- (a) equipment to which Ontario Regulation 209/01 (Elevating Devices), made under the *Technical Standards and Safety Act*, 2000, applies; or
- (b) equipment used to lift, lower or transfer a person who is not a worker. O. Reg. 67/93, s. 75; O. Reg. 25/09, s. 9.

76. (1) Material handling equipment shall not be used to support, raise or lower a worker unless the requirements of this section are met.

(2) If material handling equipment is used to support, raise or lower a worker, the worker shall be on a platform that is,

- (a) equipped with adequate safety devices that automatically prevent the platform and load from falling if the platform’s normal support fails;
- (b) suspended from a boom that does not move; or
- (c) attached to a mast or boom which,
 - (i) is hydraulically or pneumatically operated, and
 - (ii) is equipped with a safety device that will prevent free fall of the platform in the event of a pressure line failure.

(3) A worker on a platform that is suspended from a boom that does not move shall be attached to a separate lifeline suspended from the boom or a fixed support capable of supporting at least four times the weight of the worker.

(4) If the material handling equipment is not designed for the specific purpose of hoisting personnel, the load applied to it shall be less than one-half the maximum rated load.

(5) The platform shall have a sign indicating the load that may be applied to it under subsection (4).

(6) If controls are provided at more than one location,

- (a) each control station shall be provided with means that allow the operator to cut off power to the equipment; and
- (b) interlocks shall be provided so that only one station can be operative at any one time.

(7) Except when the controls are operated from the platform, a worker other than the worker on the platform shall attend to and operate them. O. Reg. 67/93, s. 76.

77. If a worker who is operating material handling equipment is exposed to overhead hazards and adequate protection from the hazards is not provided by the use of personal protective equipment, overhead protection by means of a cab, screen, canopy, guard or other adequate protection shall be provided on the equipment. O. Reg. 67/93, s. 77.

78. Except for purpose of testing, no material handling equipment shall be loaded in excess of its maximum rated load. O. Reg. 67/93, s. 78.

79. (1) Lifting equipment shall be thoroughly examined by a competent person to determine its capability of handling the maximum load as rated,

- (a) before being used for the first time; and
- (b) thereafter as often as necessary but not less frequently than recommended by the manufacturer and, in any case, at least once a year.

(2) A permanent record shall be kept of each examination conducted under subsection (1) for as long as the equipment remains on the premises and for one year after the equipment is removed and the record shall be signed by the person who conducted it.

(3) Lifting equipment shall be clearly marked with sufficient information to enable its operator to determine the maximum rated load that the equipment is capable of lifting under any operating condition.

(4) If lifting equipment is equipped with limit switches, the switches shall,

- (a) automatically cut off the power;
- (b) automatically apply the brake when a load reaches its permissible limit; and
- (c) be used as an operating control only when designed for such use.

(5) If a limit switch is used as an operating control on lifting equipment, a second limit switch shall be located behind the first switch.

(6) The lifting equipment's controls shall be attended when its load is in the raised position.

(7) Lifting equipment shall be attended when the forks, bucket, blades or similar part is in the raised position unless,

- (a) the equipment is a hydraulic or pneumatic hoist that supports the load from below and is fixed in one location; or
- (b) the forks, bucket, blades or similar part is solidly supported. O. Reg. 67/93, s. 79.

LADDERS

80. (1) Except for a step stool, a worker shall not stand upon a chair, box or other loose object while working.

(2) A chair, box or other loose object shall not be used to support a ladder, scaffold or working platform. O. Reg. 67/93, s. 80.

81. The maximum length of a ladder measured along the side rail shall not be more than,

- (a) six metres for a step-ladder;
- (b) nine metres for a single ladder; and
- (c) thirteen metres for an extension or sectional ladder. O. Reg. 67/93, s. 81.

82. (1) A ladder shall,

- (a) have adequate strength, stiffness and stability to support any load likely to be applied to it;
- (b) be free from broken or loose members or other faults;
- (c) have rungs evenly spaced; and
- (d) be equipped with slip-resistant feet.

(2) A wooden ladder shall not be painted or coated with an opaque material. O. Reg. 67/93, s. 82.

83. When a ladder is being used it shall,

- (a) be placed on a firm footing and secured against slipping;
- (b) if the ladder is between six and nine metres in length, be securely fastened or be held in place by one or more workers while being

used;

- (c) if the ladder exceeds nine metres in length, be securely fastened or stabilized to prevent it from tipping or falling;
- (d) when not securely fastened, be inclined so that the horizontal distance from the top support to the foot of the ladder is not less than one-quarter and not more than one-third of the length of the ladder; and
- (e) if the ladder is likely to be endangered by traffic, have a worker stationed at its foot to direct such traffic or have barriers or warning signs placed at its foot. O. Reg. 67/93, s. 83

84. (1) When a step-ladder is being used as a self-supporting unit, its legs shall be fully spread and the spreader shall be locked.

(2) No worker shall stand on the top of a step-ladder or shall use the pail shelf as a step. O. Reg. 67/93, s. 84.

SCAFFOLDS

85. If work cannot be done from a ladder without hazard to a worker, a scaffold shall be provided for the worker. O. Reg. 67/93, s. 85.

86. Only a competent person shall supervise the erection, alteration and dismantling of a scaffold. O. Reg. 67/93, s. 86.

87. (1) Every scaffold shall be capable of supporting,

- (a) two times the maximum load to which it is likely to be subjected, without exceeding the allowable unit stresses for the particular materials used; and
- (b) four times the maximum load to which it is likely to be subjected, without overturning.

(2) No scaffold shall be loaded in excess of the maximum load it could reasonably be expected to support and not in excess of the maximum load set out in clauses (1) (a) and (b).

(3) The requirements in this section and in section 88 do not apply to a suspended scaffold. O. Reg. 67/93, s. 87.

88. (1) Every scaffold shall,

- (a) be constructed of suitable structural material;
- (b) have horizontal members that are adequately secured to prevent lateral movement and that do not have splices between the points of support;

- (c) have footings, sills or supports that are sound, rigid and capable of supporting at least two times the maximum load to which the scaffold is likely to be subjected without settlement or deformation that may affect the stability of the scaffold;
 - (d) where it consists of a structural system of tubular metal frames, have connecting devices between components that provide positive engagement in compression and tension;
 - (e) have all fittings, gear, base plates and wheels installed according to the manufacturer's instructions;
 - (f) have safety catches on all hooks;
 - (g) be adequately secured at vertical intervals not exceeding three times the least lateral dimension of the scaffold, measured at the base, to prevent lateral movement;
 - (h) where lumber is used in its construction, be constructed only of Construction Grade spruce or Number 1 Grade spruce; and
 - (i) have all uprights braced diagonally in the horizontal and vertical planes to prevent lateral movement.
- (2) If a scaffold is more than fifteen metres in height, it shall be designed by an engineer and constructed in accordance with the design. O. Reg. 67/93, s. 88.

89. A scaffold mounted on castors or wheels, other than a movable working platform to which subsection 94 (1) applies, shall,

- (a) have a height which does not exceed three times the least lateral dimension of the scaffold,
 - (i) measured at the base, or
 - (ii) measured between the outriggers;
- (b) be equipped with a suitable braking device on each castor or wheel; and
- (c) have the brakes applied when,
 - (i) any worker is on the scaffold or the working platform of the scaffold, or
 - (ii) the scaffold is unattended. O. Reg. 67/93, s. 89.

90. The working platform of a scaffold shall,

- (a) be designed, constructed and maintained to support all loads to which it may be subjected without exceeding the allowable unit

stresses for the materials used, and in any event shall support not less than 2.4 kilonewtons per square metre;

- (b) be at least forty-six centimetres in width;
- (c) be provided, at each open side and at the ends of the platform, with guardrails that comply with section 37;
- (d) if the platform consists of sawn lumber planks, have planks of Number 1 Grade spruce that,
 - (i) bear a legible grade identification stamp or bear a permanent grade identification mark,
 - (ii) are at least forty-eight millimetres in thickness by 250 millimetres in width with a span not exceeding 2.1 metres,
 - (iii) overhang their supports by not less than 150 millimetres and not more than 300 millimetres, and
 - (iv) are cleated or otherwise secured against slipping; and
- (e) if the platform required consists of planks manufactured of laminated wood, metal or a combination of materials, consist of planks tested in accordance with good engineering practice to demonstrate structural equivalence to the sawn lumber planks specified in clause (d). O. Reg. 67/93, s. 90.

SUSPENDED SCAFFOLDS

91. (1) This section applies to,

- (a) a suspended scaffold that is permanently installed on a building or structure;
- (b) a suspended scaffold that is transported in component form and is assembled for use at a work site;
- (c) a boatswain's chair or single-point suspension equipment intended for the support of one worker; and
- (d) the supports and equipment for a suspended scaffold or boatswain's chair, including lines, outrigger beams, davits, receptacles for outrigger beams or davits, cornice hooks, parapet wall hooks and anchors for attachment of primary suspension lines or lifelines.

(2) A worker who is on or is getting on or off a suspended scaffold, boatswain's chair or similar single-point suspension equipment shall be protected by a fall arrest system that meets the requirements of section 13.

(3) All mechanically or electrically operated equipment described in subsection (1) shall,

- (a) be suitable for the purpose for which it is used;
- (b) have legible operating and maintenance instructions of the manufacturer affixed to the equipment in a conspicuous location;
- (c) be operated, inspected and maintained in accordance with the manufacturer's instructions;
- (d) be used only in a manner which does not endanger a worker; and
- (e) not be used when a component, which may affect its safe operation, is damaged or defective.

(4) Primary suspension lines and lifelines used in connection with equipment described in subsection (1) shall,

- (a) be rigged in accordance with generally accepted rigging practice;
- (b) be rigged so that each line hangs vertically from the roof or access level to the ground or egress level of a worker using the line;
- (c) have a breaking strength of at least ten times the static load that the line is intended to bear;
- (d) have each connecting end wrapped around a protective thimble and securely fastened,
- (i) by means of a swagged fitting or eye splice if applied by the manufacturer of the line, or
- (ii) if the line is a wire rope, by a minimum of three clamps; and
- (e) be inspected before each day's use by a competent person who shall report any defects or damage to a supervisor.

(5) Primary suspension lines and lifelines used in connection with equipment described in subsection (1) shall not be used when they are defective or damaged.

(6) A worker on a suspended scaffold, boatswain's chair or similar single-point suspension equipment shall have an effective means of summoning assistance in case of emergency. O. Reg. 67/93, s. 91.

92. (1) A boatswain's chair or similar single-point suspension equipment shall,

- (a) have a seat at least 600 millimetres long and 250 millimetres wide of one piece construction capable of supporting 225 kilograms;

- (b) be supported by a sling constructed of a wire rope of at least nine millimetres that crosses underneath the seat;
 - (c) not be used where the descent exceeds ninety metres;
 - (d) only be used for areas within arm's reach of a worker freely suspended on the primary support line; and
 - (e) not be used in conjunction with corrosive substances or solutions.
- (2) A natural or synthetic line used as primary support line for a boatswain's chair or other similar single-point suspension equipment shall be,

- (a) doubled from the anchor point or point of suspension of the line to ground or egress level;
- (b) permanently identified with,
 - (i) the name of the manufacturer of the line,
 - (ii) the date of the manufacture of the line, and
 - (iii) the length of the line;
- (c) protected from abrasion;
- (d) used only with a descent control or similar device,
 - (i) approved by the manufacturer of the descent control or similar device for use in window cleaning operations, and
 - (ii) in accordance with the installation, operating and maintenance instructions of the manufacturer of the descent control or similar device, which instructions shall be kept available for the inspection of an inspector;
- (e) discarded when no longer safe for use or in accordance with the manufacturer's recommendations, whichever occurs first; and
- (f) tested by a recognized testing laboratory at least once every twelve months for compliance with clause 91 (4) (c), and, if found not in compliance, discarded. O. Reg. 67/93, s. 92.

93. (1) Static or horizontal lines rigged between anchor points for direct attachment of lifelines or primary support lines shall meet the requirements of this section.

- (2) An engineer shall,
 - (a) instruct on the use of the static or horizontal lines and primary support lines; and

(b) certify the maximum load to be applied to them.

(3) The support capability of an anchor point shall exceed the total breaking strength of all support lines attached to it.

(4) Outrigger beams, cornice hooks and parapet wall hooks for support of primary support lines shall,

(a) be capable of supporting at least four times the maximum load to which they may be subjected without overturning and without exceeding the allowable unit stress for the materials of which they are constructed;

(b) be constructed of steel or aluminum or equivalent material; and

(c) be tied back to a fixed support so as to prevent their movement.

(5) Outrigger beams for support of primary support lines shall,

(a) have counterweights,

(i) that are manufactured for the purpose,

(ii) that are marked as to weight, and

(iii) that are securely attached to the outrigger beam;

(b) be accompanied by the supplier's or manufacturer's instructions indicating the number of counterweights that are necessary for the arrangements of the beam and the load that the beam can bear for each arrangement; and

(c) if positioned on a rolling undercarriage, have the undercarriage fixed to prevent the counterweights from moving while a worker is suspended by the primary support lines. O. Reg. 67/93, s. 93.

94. (1) A movable working platform operated by mechanical or electric power, including an elevating rolling scaffold and a self-propelled elevating scaffold or work platform, shall,

(a) be designed by an engineer in accordance with good engineering practice to support,

(i) two times the maximum load to which it may be subjected without exceeding the allowable unit stresses for the materials used, and

(ii) four times the maximum load to which it may be subjected without overturning;

(b) be constructed and maintained in accordance with the design of the engineer;

- (c) be capable of supporting two times the maximum load to which it may be subjected without exceeding the allowable unit stresses for the materials used;
 - (d) be provided with guardrails that comply with the requirements of section 37;
 - (e) be fitted with signs indicating the safe working load;
 - (f) if equipped with outriggers, have a notice indicating the circumstances when the outriggers shall be used;
 - (g) be equipped with a fail safe mechanism for the elevating power system in the case of a power source or system failure;
 - (h) be equipped with a dead man control that will cut the power off from the operating mechanism unless the control regulating the power is continuously operated by a worker; and
 - (i) have each component which may affect its safe operation inspected by a competent person,
 - (i) before initial use, and
 - (ii) after initial use, as often as necessary but not less frequently than recommended by the manufacturer and, in any case, at least once a year.
- (2) A movable working platform of the type described in subsection (1) shall not be used when a component that may affect its safe operation is defective.
- (3) This section does not apply to a suspended scaffold. O. Reg. 67/93, s. 94.

EXPLOSIVE HAZARDS

95. A process that is likely to produce dust, fume, gas or vapour to such an extent as to be capable of forming an explosive mixture when mixed with air shall be carried out,

- (a) in an area that has provision for the disposal of the mixture by burning under controlled conditions; or
- (b) in another area if,
 - (i) the area is identified by a sign warning of the hazard,
 - (ii) the area is isolated from other operations,
 - (iii) the area has a system of ventilation adequate to ensure that

the dust, fume, gas or vapour does not reach a hazardous concentration,

- (iv) the area has no potential sources of ignition,
- (v) any heating or air vents leading to other areas have baffles, chokes or dampers to reduce the effects of any explosion, and
- (vi) the area has provision for explosion venting. O. Reg. 67/93, s. 95.

ANAESTHETIC GASES

96. Where anaesthetic gases are likely to be present, the following measures and procedures shall be put into effect:

1. The installation of effective scavenging systems to collect, remove and dispose of waste gases.
2. The installation and use of anaesthesia respirators and machines to reduce contamination of the air in the room during administration of anaesthetic gases.
3. The implementation and use of a maintenance program for scavenging systems and anaesthesia respirators and machines and for inspecting for leakage on a monthly basis.
4. The adoption and use of proper work practices to reduce contamination of the room air during the administration of anaesthetic gases.
5. The regular maintenance of the ventilation system including filters. O. Reg. 67/93, s. 96.

ANTINEOPLASTIC DRUGS

97. (1) The employer shall, in consultation with the joint health and safety committee or health and safety representative, if any, develop, establish and put into effect written measures and procedures to protect workers who may be exposed to antineoplastic agents or to material or equipment contaminated with antineoplastic agents.

(2) The measures and procedures required by subsection (1) shall include,

- (a) procedures for the storing, preparing, handling, using, transporting and disposing of antineoplastic agents and material contaminated with antineoplastic agents;
- (b) emergency procedures to be followed in the event of a worker's

exposure to antineoplastic agents by a needle puncture, inhalation or skin contact;

- (c) procedures for the maintenance and disposal of equipment contaminated with antineoplastic agents;
- (d) measures for the use of engineering controls, work practices, hygiene practices and facilities or personal protective equipment appropriate in the circumstances; and
- (e) measures for the use of an appropriate biological safety cabinet for the preparation of antineoplastic agents.

(3) The employer shall provide training and instruction in the measures and procedures described in subsection (2) to workers who may be exposed to antineoplastic agents or to material or equipment contaminated with antineoplastic agents. O. Reg. 67/93, s. 97.

FLAMMABLE LIQUIDS

98. In sections 99, 100 and 101,

“flammable liquid” means any liquid having a flash point below 37.8 degrees Celsius and a vapour pressure below 275 kilopascals absolute at 37.8 degrees Celsius. O. Reg. 67/93, s. 98.

99. (1) Flammable liquids shall be handled in such a manner so as to prevent the hazard of explosion or fire.

(2) Flammable liquids shall be,

- (a) dispensed, removed from any potential source of ignition;
- (b) if dispensed indoors, dispensed in an area equipped with ventilation adequate to remove any hazardous concentration of fume or vapour;
- (c) transported in containers that prevent any leakage or spillage of the liquids or in containers equipped with spring-loaded caps; and
- (d) handled in a manner that prevents any leakage or spillage of the liquids, if such leakage or spillage would result in exposing the liquids to a proximate source of potential ignition that cannot be eliminated.

(3) If flammable liquid is being dispensed from a holding container, the dispensing equipment, the containers from which the flammable liquid is dispensed and the containers into which the flammable liquid is to be placed shall be bonded and grounded so as to prevent any explosion hazard. O. Reg. 67/93, s. 99.

100. (1) Flammable liquids shall be brought into a workplace only if the liquids are contained in,

- (a) sealed containers;
- (b) containers that prevent any leakage or spillage of the liquids; or
- (c) containers equipped with a flame arrester.

(2) If flammable liquids are brought into a workplace in sealed containers, the containers shall remain sealed until the contents or a portion of the contents is required for immediate use.

(3) After the flammable liquids that were brought into a workplace in sealed containers have been used, the remaining contents of the containers and any unused quantities of the flammable liquids shall be stored,

- (a) in containers that prevent any leakage or spillage of the liquids; or
- (b) in containers equipped with a spring-loaded cap. O. Reg. 67/93, s. 100.

101. (1) If more than 235 litres of flammable liquids are being stored, the liquids shall be stored,

- (a) outdoors, remote from any means of egress;
- (b) in a building used solely for the storage of flammable liquids; or
- (c) within a workplace, in a storage room that is used solely for the storage of flammable liquids and that complies with subsection (2).

(2) The storage room shall,

- (a) be separated from the rest of the building with partitions that have at least a one-hour fire resistance rating;
- (b) be equipped with,
 - (i) liquid-tight seals between interior walls and the floor and a liquid-tight ramped sill at any door opening in an interior wall, or
 - (ii) other means to prevent leakage or spillage of the flammable liquid from the storage room to another part of the workplace in the building;
- (c) be equipped with doors that are side hinged to swing outward and that are self-closing;
- (d) be equipped with a drain connected to a holding tank of sufficient

capacity to contain any possible leakage or spillage;

(e) be provided with a ventilation system that is adequate to render the atmosphere free of any accumulation of hazardous gas or vapour; and

(f) if the flammable liquids are in opened containers or have flash points below 22.8 degrees Celsius and boiling points below 37.8 degrees Celsius,

(i) be equipped with a spark-resistant floor,

(ii) be equipped with adequate explosion venting to the outdoors, and

(iii) have no potential source of ignition.

(3) If the quantity of flammable liquids to be stored indoors is 235 litres or less, the liquids shall be stored,

(a) in sealed containers of no more than twenty-three litres capacity each; or

(b) subject to section 106, in a metal cabinet of double-walled construction with a 3-point door latch and a liquid-tight door sill raised at least fifty-five millimetres above the floor. O. Reg. 67/93, s. 101.

102. (1) An internal combustion engine shall be fuelled,

(a) outside a building;

(b) only when the engine is shut off; and

(c) only if any source of ignition is more than three metres from the dispensing point.

(2) Subsection (1) does not apply to generators for emergency electrical power.

(3) A worker who is fuelling an internal combustion engine shall make an allowance for the possible expansion of the fuel due to the exposure of the equipment to higher surrounding temperature. O. Reg. 67/93, s. 102.

MATERIAL HANDLING

103. (1) Materials, articles or things shall be handled, stored and disposed of in a manner that will not cause a hazard.

(2) Materials, articles or things shall be transported, placed or stored so that they will not tip, collapse or fall and so that they can be removed or withdrawn without endangering the safety of any worker. O. Reg. 67/93,

s. 103.

104. A container used to store, transport or dispense a hazardous material shall be,

- (a) adequate to protect the worker from the substance contained in it; and
- (b) protected from physical damage. O. Reg. 67/93, s. 104.

105. Incubators, refrigerators and deep freeze units used to store cultures, specimens or biological ampules shall be identified as biohazardous. O. Reg. 67/93, s. 105.

106. Flammable materials that require refrigeration shall be stored in an explosion-proof refrigerator. O. Reg. 67/93, s. 106.

107. Bottles and test tubes shall be transported in racks or containers that prevent them from breaking, leaking or spilling their contents and that protect workers from exposure to the contents. O. Reg. 67/93, s. 107.

108. Workbenches, shelves, fume hoods and safety cabinets shall have adequate space for a worker to perform the work safely. O. Reg. 67/93, s. 108.

109. (1) In a laboratory, appropriate disinfectants and decontaminants shall be provided and used to clean workbench, fume hood and safety cabinet surfaces and floors.

(2) In a laboratory where spills of a hazardous material are likely to occur, workbench, fume hood and safety cabinet surfaces and floors shall consist of a smooth nonporous or impervious material. O. Reg. 67/93, s. 109.

110. A piping system that contains a substance which is hazardous because of its toxicity, temperature, pressure, flammability, or other property, shall have its contents and direction of flow clearly identified,

- (a) at valves and fittings;
- (b) in locations where a pipe passes through a wall or floor; and
- (c) where circumstances may make its contents or direction of flow doubtful. O. Reg. 67/93, s. 110.

HOUSEKEEPING AND WASTE

111. (1) A room used for storing laundry or janitorial materials and equipment shall be maintained in accordance with good hygiene practices.

- (2) Janitorial work that may cause dusty conditions shall be done in

a manner that will minimize the contamination of air by dust. O. Reg. 67/93, s. 111.

112. Waste materials shall be removed from work areas in a building as often as is necessary to protect the health and safety of workers. O. Reg. 67/93, s. 112.

113. (1) Objects referred to in subsection (2) that are being discarded as waste materials shall be placed in puncture-resistant containers.

(2) Subsection (1) applies to needles, knives, scissors, scalpels, broken glass or other sharp objects that are capable of cutting or penetrating the skin or any part of a worker's body. O. Reg. 67/93, s. 113.

114. (1) Used needles that are being discarded as waste material shall be discarded, immediately after use and without being bent or recapped, into a puncture-resistant container.

(2) If it is impracticable to discard used needles in accordance with subsection (1),

(a) the employer shall provide a device or equipment that protects workers from being accidentally punctured while they are recapping used needles; and

(b) the needles shall be recapped using the device or equipment described in clause (a) by workers who have received instruction and training in the use of that device or equipment.

(3) The kind of device or equipment provided under clause (2) (a) shall be chosen by the employer after consulting with the joint health and safety committee or health and safety representative, if any, and after considering their recommendations. O. Reg. 67/93, s. 114.

115. Containers that are used for storing liquid hazardous waste in a workplace shall,

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

(b) be leak-proof;

(c) if there may be internal pressure in the container, be designed so that the pressure is relieved by controlled ventilation; and

(d) shall be emptied daily or as the circumstances may reasonably require. O. Reg. 67/93, s. 115.

116. (1) This section applies to all waste materials at a facility other than those waste materials generated in office administration or general building maintenance at the facility.

(2) The employer in consultation with the joint health and safety committee or health and safety representative, if any, shall develop, establish and put into effect measures and procedures to ensure that waste materials contaminated or potentially contaminated with hazardous infectious agents that are likely to endanger the health or safety of a worker are collected, contained, identified, transported, handled, stored and treated in a manner that will not endanger the health or safety of a worker.

(3) The employer shall ensure that a worker who generates, collects, transports, handles or treats contaminated or potentially contaminated waste materials is trained in the measures and procedures referred to in subsection (2). O. Reg. 67/93, s. 116.

117. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 67/93, s. 117.

TABLE 1 REVOKED: O. REG. 495/09, s. 2.

FORM 1 REVOKED: O. REG. 59/18, s. 2.

OTHER REGULATIONS

ONTARIO REGULATION 474/07**NEEDLE SAFETY**

Consolidation Period: From April 11, 2022 to the e-Laws currency date.

Last amendment: 274/22.

This is the English version of a bilingual regulation.

Definition

1. In this Regulation,
“safety-engineered needle” means,
 - (a) a hollow-bore needle that,
 - (i) is designed to eliminate or minimize the risk of a skin puncture injury to the worker, and
 - (ii) is licensed as a medical device by Health Canada, or
 - (b) a needleless device that,
 - (i) replaces a hollow-bore needle, and
 - (ii) is licensed as a medical device by Health Canada. O. Reg. 474/07, s. 1.

Application

2. (1) This Regulation applies in each of the following circumstances:
 1. A worker is to do work requiring the use of a hollow-bore needle on a person for a therapeutic, preventative, palliative, diagnostic or cosmetic purpose, in any workplace.
 2. A worker is to do any work requiring the use of a hollow-bore needle, in a workplace listed in subsection (2). O. Reg. 439/09, s. 1 (1).
- (2) The workplaces mentioned in paragraph 2 of subsection (1) are the following:
 1. Every hospital as defined in the *Public Hospitals Act*.
 2. Every private hospital as defined in the *Private Hospitals Act*.
 3. Homewood Health Centre Inc.
 4. Every laboratory or specimen collection centre as defined in the *Laboratory and Specimen Collection Centre Licensing Act*.

5. Every psychiatric facility as defined in the *Mental Health Act*.
6. Every long-term care home as defined in the *Fixing Long-Term Care Act*, 2021.

7., 8. REVOKED: O. Reg. 439/09, s. 1 (2).

O. Reg. 439/09, s. 1.

Provision of safety-engineered needles

3. (1) When a worker is to do work requiring the use of a hollow-bore needle, the employer shall provide the worker with a safety-engineered needle that is appropriate for the work. O. Reg. 474/07, s. 3 (1).

(2) Subsection (1) does not apply if the employer is unable, despite making efforts that are reasonable in the circumstances, to obtain a safety-engineered needle that is appropriate for the work. O. Reg. 474/07, s. 3 (2).

Use of safety-engineered needle

4. (1) A worker who has been provided with a safety-engineered needle for work described in subsection 3 (1) shall use the safety-engineered needle for the work. O. Reg. 474/07, s. 4 (1).

(2) Despite subsection (1), the worker may use a hollow-bore needle that is not a safety-engineered needle if he or she believes on reasonable grounds that, in the particular circumstances, the use of a safety-engineered needle would pose a greater risk of harm than the use of the hollow-bore needle. O. Reg. 474/07, s. 4 (2).

(3) In subsection (2), “risk of harm” refers to either or both of the following risks:

1. A risk of harm to the worker or to another worker.
2. If the work involves the use of a needle on a person, a risk of harm to him or her. O. Reg. 474/07, s. 4 (3).

(4) The employer shall develop, establish and provide training for workers to assist them in applying subsection (2). O. Reg. 474/07, s. 4 (4).

Exceptions, emergencies and risks to health

5. (1) Subsection 3 (1) does not apply if all of the following conditions are satisfied:

1. The workplace is located in a part of Ontario in which,
 - i. a declaration of emergency made under the Emergency

Management and Civil Protection Act is in effect, or

ii. a situation exists that constitutes or may constitute a serious risk to public health.

2. The employer's supplies of safety-engineered needles appropriate for the work have been exhausted.
3. The risk of harm from postponing the work until a safety-engineered needle appropriate for the work becomes available is greater than the risk of harm from using a hollow-bore needle that is not a safety-engineered needle. O. Reg. 474/07, s. 5 (1); O. Reg. 317/08, s. 3; O. Reg. 439/09, s. 2.

(2) In paragraph 3 of subsection (1), "risk of harm" refers to any or all of the following risks:

1. A risk of harm to the worker or to another worker.
2. If the work involves the use of a needle on a person, a risk of harm to him or her.
3. An immediate or potential risk to the public or to the public interest. O. Reg. 474/07, s. 5 (2).

6. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 474/07, s. 6.

R.R.O. 1990, REGULATION 861**X-RAY SAFETY**

Consolidation Period: From July 1, 2021 to the e-Laws currency date.

Last amendment: 425/21.

This Regulation is made in English only.

1. In this Regulation,

“absorbed dose” means the mean energy per unit mass imparted by ionizing radiation to matter;

“air kerma” means the sum of the initial kinetic energies per unit mass of all the charged particles liberated by uncharged ionizing radiation in air;

“Director” means the Director of the Health and Safety Support Services Branch of the Ministry of Labour;

“dose equivalent” means the product of absorbed dose and a quality factor where the quality factor is a measure of the biological effectiveness of the radiation, and is assigned the value 1.0 for X-rays;

“failsafe design” means a design in which any failure of safety indicators or components that can reasonably be anticipated causes the production or emission of X-rays to cease;

“gray” means,

(a) a unit of absorbed dose, and is realized when one joule of energy has been imparted per kilogram of material, or

(b) a unit of air kerma, and is realized when one joule of energy has been liberated per kilogram of air;

“redundant”, when used with reference to a light, means a light with two or more separate and equivalent bulbs so designed that the failure of one bulb will not affect the operation of the other bulb or bulbs;

“shield” or “shielding” means radiation absorbing material or materials used to reduce the absorbed dose or absorbed dose rate imparted to an object;

“sievert” means a unit of dose equivalent, and for X-rays the dose equivalent measured in sieverts is numerically equal to the absorbed dose measured in grays;

“X-ray machine” means an electrically powered device, the principal purpose of which is the production of X-rays;

“X-ray source” means any device, or that portion of any device, that emits X-rays, whether or not the device is an X-ray machine;

“X-ray worker” means a worker who, as a necessary part of the worker’s employment, may be exposed to X-rays and may receive a dose equivalent in excess of the annual limits set forth in Column 4 of the Schedule;

“X-rays” means electrically-generated electromagnetic radiation of maximum photon energy not less than 5,000 electron volts. O. Reg. 196/18, s. 1.

2. Subject to section 3, this Regulation applies to every owner, employer, supervisor and worker at a workplace where,

- (a) an X-ray machine is present or used; or
- (b) an X-ray source that is not an X-ray machine is present or used, if the X-ray source is capable of producing an air kerma rate greater than 1.0 microgray per hour at any accessible point outside its surface.

3. (1) This Regulation does not apply to an X-ray source that is licensable under the *Nuclear Safety and Control Act* (Canada). O. Reg. 106/18, s. 2.

(2) Sections 5, 6, 7 and 8 of this Regulation do not apply in respect of an X-ray machine the installation, registration or operation of which is subject to the *Healing Arts Radiation Protection Act*.

4. Except as permitted under the *Healing Arts Radiation Protection Act*, an X-ray source shall not be operated for the irradiation of a worker.

5. (1) An X-ray source shall not be used at a workplace unless the employer who has possession of the X-ray source is registered with a Director. O. Reg. 106/18, s. 3(1).

(2) An application for registration under this section shall be in a form obtained from the Ministry and shall be filed with a Director. O. Reg. 106/18, s. 3 (2).

(3) An employer who was registered under Ontario Regulation 263/84 or Regulation 855 of the Revised Regulations of Ontario, 1980 or a predecessor thereof shall be deemed to be registered under this section if the registration was subsisting at the end of the 29th day of October, 1986.

(4) If an employer who is registered under this section ceases to have

possession of an X-ray source, the employer shall forthwith give a notice to a Director advising the Director of that fact. O. Reg. 106/18, s.3 (3).

(5) An employer's registration under this section terminates when the employer notifies a Director that the employer no longer has possession of any X-ray sources. O. Reg. 106/18, S 3 (4).

6. (1) An X-ray source shall not be installed or used in a permanent location and an X-ray source that is designed for portable or mobile use shall not be installed or used regularly in one location unless an application for review, together with plan location drawings, of the installation have been reviewed by and are acceptable to an inspector.

(2) Subsection (1) does not apply to an X-ray source that,

- (a) was in use in a permanent location before the 27th day of April, 1984, if it has remained continuously in that location since that time and so long as it remains in that location; or
- (b) was installed after the 26th day of April, 1984, if the installation was made in compliance with Ontario Regulation 263/84 and there was compliance with that Regulation until the end of the 29th day of October, 1986.

(3) An application mentioned in subsection (1) shall be in a form obtained from the Ministry and shall be accompanied by the plan location drawings mentioned in that subsection, in duplicate. O. Reg. 106/18, s. 4 (1).

(4) Plan location drawings mentioned in subsection (1),

- (a) shall bear the name of the applicant and the address of the location;
- (b) shall be on a legible scale that is not less than 1:100 and that is suitable for microfilming;
- (c) shall indicate the direction north;
- (d) shall show the proposed location of the X-ray source and, where applicable, the range of its motion;
- (e) shall show the proposed location of the X-ray control panel, if the location of the control panel is different from that of the X-ray source;
- (f) shall indicate the use of rooms or areas that are adjacent, both horizontally and vertically, to the proposed location;
- (g) shall indicate the type and thickness of the shielding installed or to be installed on the boundaries of the proposed location; and

(h) shall indicate the type and location of the safety devices such as warning lights, interlocks and cut-off switches.

(5) An application under this section shall be filed with a Director. O. Reg. 106/18, s. 4 (2).

(6) Where an application under this section or a predecessor of this section has been found acceptable by an inspector, the X-ray source to which the application relates shall not be installed except in accordance with the application and the plan location drawings as accepted by the inspector.

(7) An X-ray source to which subsection (1) applies or that is described in subsection (2) shall not be used, if after the installation of the X-ray source there is a change in,

- (a) the installation or use of the X-ray source;
- (b) the use of rooms or areas adjacent, horizontally or vertically, to the X-ray source; or
- (c) any shielding of the X-ray source, that may result in an increase in the exposure of a worker to X-rays unless the change has been reviewed by and is acceptable to an inspector.

(8) An employer shall request a review of a change described in subsection (7) by giving the request to a Director. O. Reg. 106/18, s. 4 (2).

7. (1) Where an employer comes into possession of an X-ray source that is designed for portable or mobile use and that is so used, notice thereof shall be given to a Director. O. Reg. 106/18, s. 5.

(2) The notice required by subsection (1) shall be in writing and shall include,

- (a) the name and address of the employer;
- (b) the employer's registration number, if any, under section 5;
- (c) the location where the X-ray source will normally be stored;
- (d) the purpose for which the X-ray source will be used;
- (e) the make, model and serial number of the X-ray source; and
- (f) the maximum operating voltage and current of the X-ray source.

8. An employer shall designate a person, for each X-ray source, who is competent because of knowledge, training or experience in the use and operation of X-ray sources and in radiation safety practices, to exercise direction over the safe use and operation of the X-ray source, and shall

advise a Director in writing of the name of the person designated. O. Reg. 106/18, s. 6.

9. (1) An employer who employs a person as an X-ray worker shall, at the time that employment begins,

- (a) inform the worker in writing that the worker is employed as an X-ray worker;
- (b) inform the worker of the limits imposed by subsection 10 (1) on the dose equivalent that may be received by the worker; and
- (c) if the worker is female, inform her of the dose equivalent limit mentioned in subsection 10 (2) applicable to a pregnant X-ray worker.

(2) An employer shall maintain a list of all X-ray workers in the employment of the employer.

10. (1) The dose equivalent received or that may be received by a worker shall be as low as is reasonably achievable, and in any case,

- (a) an X-ray worker shall not receive a dose equivalent in excess of the annual limits set out in Column 3 of the Schedule; and
- (b) a worker who is not an X-ray worker shall not receive a dose equivalent in excess of the annual limits set out in Column 4 of the Schedule.

(2) Despite subsection (1), an employer shall take every precaution reasonable in the circumstances to ensure that the mean dose equivalent received by the abdomen of a pregnant X-ray worker does not exceed 5 millisieverts during the pregnancy.

11. The following measures and procedures shall be carried out in a workplace where an X-ray source is used:

1. X-ray warning signs or warning devices shall be posted or installed in conspicuous locations.
2. Every X-ray source capable of producing an air kerma rate greater than 5 micrograys per hour at any accessible point shall be labelled at its operating controls as a source of X-rays.
3. Where the air kerma in an area may exceed 100 micrograys in any one hour, access to the area shall be controlled by,
 - i. locks or interlocks if the X-ray source is one to which subsection 6 (1) applies or is described in subsection 6 (2), and
 - ii. barriers and X-ray warning signs if the X-ray source is portable

or mobile and is being so used.

4. To ensure that the dose equivalent limits mentioned in section 10 are not exceeded,
 - i. structural or other shielding shall be installed as is necessary, and
 - ii. diaphragms, cones and adjustable collimators or other suitable devices shall be provided and used as are necessary to limit the dimensions of the useful X-ray beam.

12. (1) An employer shall provide to each X-ray worker a suitable personal dosimeter that will provide an accurate measure of the dose equivalent received by the X-ray worker.

(2) An X-ray worker shall use the personal dosimeter as instructed by the employer.

(3) An employer shall ensure that the personal dosimeter provided to an X-ray worker is read accurately to give a measure of the dose equivalent received by the worker and shall furnish to the worker the record of the worker's radiation exposure.

(4) An employer shall verify that the dose equivalent mentioned in subsection (3) is reasonable and appropriate in the circumstances, and shall notify an inspector of any dose equivalent that does not appear reasonable and appropriate.

(5) An employer shall retain an X-ray worker's personal dosimeter records for a period of at least three years.

13., 14. Revoked: O. Reg. 425/21, s. 1.

15. (1) This section applies only to X-ray machines used for industrial radiography or industrial fluoroscopy but does not apply to an X-ray machine to which section 17 applies.

(2) No X-ray machine to which this section applies shall be used except by or under the supervision of a competent person.

(3) In addition to any other requirements of this Regulation, the following requirements apply with respect to every X-ray machine to which this section applies:

1. The control panel of the X-ray machine shall have a plainly visible warning light to indicate when X-rays are being produced in the X-ray tube.
2. The X-ray machine, if installed in a permanent location or if designed for portable or mobile operation but used regularly in

one location, shall be contained in an enclosure.

3. No person shall be permitted in the enclosure required by paragraph 2 while X-rays are being produced.
4. The enclosure required by paragraph 2 shall be provided with,
 - i. reliable locks or interlocks to prevent any person from entering a radiation enclosure during an exposure and, where an exposure is terminated by an interlock, it shall only be possible to restart the exposure from the control panel, and
 - ii. conspicuous warning lights of failsafe or redundant design near each entrance to the enclosure that indicate when X-rays are being produced,

and paragraph 3 of section 11 does not apply.

5. If the enclosure required by paragraph 2 is of such a size or is so arranged that the operator cannot readily determine whether it is unoccupied, it shall be provided with,
 - i. suitable audible or visible pre-exposure warning signals within the enclosure that shall be actuated for not less than ten or more than thirty seconds immediately before the initiation of an X-ray exposure,
 - ii. suitable audible or visible warning signals within the enclosure that shall be actuated during the X-ray exposure, and
 - iii. a suitable exit to enable any person to leave the enclosure without delay and without having to pass through the primary X-ray beam or an effective means, within the enclosure, that,
 - A. prevents or interrupts an X-ray exposure,
 - B. cannot be reset from outside the enclosure, and
 - C. can be reached without having to pass through the primary X-ray beam.
6. An X-ray machine shall be operated, and, where an enclosure is required by paragraph 2, the enclosure shall be shielded in such a manner that,
 - i. an X-ray worker is not likely to receive an effective dose equivalent in excess of 1 millisievert per week, and
 - ii. a worker who is not an X-ray worker is not likely to receive an effective dose equivalent in excess of 100 microsieverts per week.

7. The employer shall ensure that a direct reading dosimeter of a suitable type is provided to each X-ray worker who in the course of his or her work may be exposed to an air kerma rate in excess of 100 micrograys per hour.
8. An X-ray worker provided with a direct reading dosimeter shall use it and shall determine the amount by which its reading has increased during each work day and record that amount at the end of the work day.
9. The employer shall retain the direct reading dosimeter records of each X-ray worker provided with such a dosimeter for a period of at least three years.
10. At least one radiation survey meter of a suitable type shall be provided for each portable or mobile X-ray machine and it shall be calibrated at least once every twelve months and kept in good working order.

16. In addition to any other requirement of this Regulation, the following requirements apply to every X-ray machine used for the diagnostic examination of animals:

1. Where practicable, radiographic procedures shall be performed in a room designed for the purpose of performing X-ray examinations of animals.
2. The air kerma due to leakage radiation from the X-ray tube housing or from an attached beam-limiting device shall not exceed 1 milligray in one hour at a distance of 1 metre from the focal spot of the X-ray tube.
3. Exposure duration shall be controlled by a preset timing mechanism and shall be initiated by a switch that requires positive action by the operator to continue the exposure and that allows the operator to remain at least 2 metres from the tube housing.
4. To the extent practicable, the dimensions of the useful beam shall be restricted to not more than those of the film.
5. The film cassette shall not be held by hand during an exposure.
6. The animal being X-rayed shall be restrained or supported by mechanical means where practicable.
7. If an animal is required to be restrained or supported by hand, a protective apron and gloves, providing shielding equivalent to at least 0.5 millimetre of lead, shall be worn by any person providing the restraint or support.

8. A record of radiographic exposures, including the date, kilovoltage, tube current and duration of each exposure, shall be maintained and kept for at least one year.

17. In addition to any other requirements of this Regulation, where an employer is in possession of an X-ray source in which the X-ray source, the object or the portion of the object being exposed to X-rays and the detection device are enclosed in a cabinet that, independent of existing structures, provides radiation attenuation and prevents access to the X-ray beam, the employer shall comply with the following requirements:

1. A warning device that indicates when X-rays are being produced shall be mounted on or near the cabinet in such a way as to be conspicuous from any position from which the cabinet can be opened.
2. Access doors and sample ports shall be interlocked with the X-ray source or with an adequately shielded shutter of failsafe design and, where operation has been interrupted by an interlock, it shall be possible to resume operation only from the control panel after the interlock has been reset.
3. The cabinet shall be so arranged and shielded as to prevent the air kerma rate from exceeding 5 micrograys per hour at any accessible point 5 centimetres from the external surface, under all possible operating conditions.
4. Cabinet X-ray equipment that is intended to permit the entry of a person shall also be provided with,
 - i. suitable audible or visible warning signals within the cabinet that shall be actuated for at least ten seconds immediately prior to the initiation of X-ray production after the closing of any door that is designed to permit human access into the cabinet,
 - ii. suitable audible or visible warning signals within the cabinet that shall be actuated during X-ray production, and
 - iii. effective means within the enclosure to prevent or interrupt the production of X-rays, that cannot be reset from outside the enclosure and that can be reached without having to pass through the primary X-ray beam.

18. In addition to any other requirements of this Regulation, where an employer is in possession of an X-ray source that consists of analytic X-ray equipment to which section 17 does not apply and that is primarily used to determine the structure or composition of a sample of a material, the

employer shall comply with the following requirements:

1. The control panel shall have an indicator, in close proximity to the X-ray "ON/OFF" switch, that clearly indicates when X-rays are being produced in the X-ray tube.
2. A warning light shall be mounted near each X-ray tube in such a way as to be clearly visible from any direction from which the tube can be approached, that indicates when X-rays are being produced.
3. The condition of each shutter, open or closed, shall be clearly indicated at or near the X-ray tube.
4. Each port shall be designed in such a way that the X-ray beam can emerge only when a camera or other recording device is in its proper position, wherever practicable.
5. At least one of the warning or safety devices mentioned in paragraphs 1 to 4 shall be of failsafe design.
6. A guard or interlock which prevents entry of any part of the body into the primary beam path shall be used, wherever practicable.
7. A shield shall be provided to absorb the primary beam at the nearest practicable position beyond the point of intersection of the beam and the sample that it is intended to irradiate.
8. All unused ports shall be secured in such a way as to prevent inadvertent opening.

19. In applying this Regulation, a procedure or device may vary from the procedure or device prescribed in this Regulation if the protection afforded thereby is equal to or greater than the protection afforded by the procedure or device prescribed.

SCHEDULE

Column 1 Part of body irradiated	Column 2 Exposure conditions and comments	Column 3 Dose equivalent annual limit (millisieverts)	Column 4 Dose equivalent annual limit (millisieverts)
Whole body or trunk of body	Uniform irradiation	50	5

Partial or non-uniform Irradiation of body	The limit applies to the effective dose equivalent defined in Note (a)	50	5
Lens of eye	Irradiated either alone or with other organs or tissues	150	50
Skin	The limit applies to the mean dose equivalent to the basal cell layer of the epidermis for any area of skin of 1 square centimetre or more	500	50
Individual organs or tissues other than lens of eye or skin	The limit on effective dose equivalent applies, with an overriding limit on the dose equivalent to the individual organ or tissue	500	50

Notes to the Schedule:

- (a) The EFFECTIVE DOSE EQUIVALENT, H_E , is determined by the following formula:

$$H_E = \sum_T W_T H_T$$

where:

- (i) T is an index for tissue type;
- (ii) H_T is the annual dose equivalent in tissue T;
- (iii) W_T is a weighting factor which has the following values:

0.25 for the gonads,

0.15 for the breast,

0.12 for the red bone marrow,

0.12 for the lungs,

0.03 for the bone surfaces,

0.03 for the thyroid, and

0.06 for each of the five other organs or tissues receiving the highest dose equivalents, but excluding the skin, extremities and eye lenses. The exposure of all other remaining tissues can be neglected. When the gastro-intestinal tract is irradiated,

the stomach, small intestine, upper large intestine and lower large intestine shall be considered as four separate organs; and

(iv) $\sum_T W_T H_T$ is the sum of the $W_T H_T$ values for all irradiated tissues which receive more than 1 millisievert in a given year.

- (b) The annual limits do not include any dose equivalent received by a worker from background sources or received as a patient undergoing medical diagnostic or therapeutic procedures.
- (c) The annual limits include any dose equivalent received by a worker, as a consequence of his or her occupation, from all sources of ionizing radiation.

O. Reg. 106/18, s. 8.

FORMS 1, 2 REVOKED: O. REG. 106/18, S. 9.

ONTARIO REGULATION 629/94**DIVING OPERATIONS**

Consolidation Period: From July 1, 2021 to the e-Laws currency date.

Last amendment: 428/21.

This is the English version of a bilingual regulation.

**PART I
INTERPRETATION**

1. In this Regulation,

“adequate”, in relation to a procedure, material, device, object or any other thing, means sufficient for its intended and actual use and sufficient to protect a worker from damage to the worker’s body or health, and “adequately” has a corresponding meaning; (“adéquat”)

“aquarium exhibit diver” means a diver who, at an aquarium facility, maintains underwater exhibits, conducts public presentations or monitors animal husbandry; (“plongeur d’aquarium”)

“atmospheric diving” means diving where the diver is always at one atmosphere; (“plongée à pression atmosphérique”)

“atmospheric diving system” means a diving system designed to withstand external pressures greater than one atmosphere while the internal pressure remains at one atmosphere and includes a one-person submarine; (“système de plongée à pression atmosphérique”)

“bail-out system” means an emergency breathing mixture supply worn by a diver; (“appareil de sauvetage”)

“bottom time” means the total elapsed time measured in minutes, from the time a descending diver leaves the surface to the time the diver begins final ascent, rounded to the next whole minute; (“durée de plongée”)

“breathing mixture” means a mixture of gases for human respiration and includes pure oxygen; (“mélange respiratoire”)

“CSA Standard” means a standard published by the Canadian Standards Association; (“norme CSA”)

“decompression” means the procedure that a diver follows during the ascent from depth in order to minimize the risk of decompression sickness; (“décompression”)

"deep diving" means diving to depths greater than 165 feet; ("plongée profonde")

"dive site" means a surface location at which diving personnel and equipment are located in support of the underwater work site; ("lieu de plongée")

"diver" means,

- (a) an atmospheric diving system operator, and
- (b) a worker who performs work underwater at any pressure greater than one atmosphere,

and includes a standby diver who dives in the event of a health or safety emergency; ("plongeur")

"diver's tender" means a competent person who assists a diver at the dive site; ("assistant de plongeur")

"diving operation" means work performed underwater by divers or work performed on the surface in support of divers, and includes underwater inspection, investigation, excavation, construction, alteration, repair or maintenance of equipment, machinery, structures or ships and the salvage of sunken property; ("opération de plongée")

"employer associated with a diving operation" means an employer of,

- (a) a diver who participates in the diving operation,
- (b) a standby diver who participates in the diving operation,
- (c) a diver's tender who participates in the diving operation,
- (d) a diving supervisor for the diving operation,
- (e) a hyperbaric chamber operator who participates in the diving operation,
- (f) a life support technician who participates in the diving operation, or
- (g) any other worker who participates in the diving operation at or near the dive site or underwater work site; ("employeur associé à une opération de plongée")

"hyperbaric chamber" means a pressure vessel and associated equipment designed for subjecting humans to pressures; ("caisson hyperbare")

"lifeline" means a safety rope used to tether a diver; ("ligne de sécurité")

"liveboating" means a diving operation conducted from a vessel the

propeller of which is turning, whether the vessel is stationary or moving; ("plongée avec bateau-soutien")

"locked-out" means made inoperable by means that are under the direct control of the diving supervisor or a person authorized by the diving supervisor; ("cadenassé")

"man basket" means a device used to transport a diver from a height above the water surface to the surface of the water for safe entry and exit to and from the water; ("nacelle")

"mixed gas" means a breathing mixture other than air; ("mélange gazeux")

"non-saturation diving" means diving in which decompression occurs during ascent from the underwater work site; ("plongée légère")

"open (wet) bell" means a diving bell designed to be operated without a differential pressure across its hull; ("cloche de plongée ouverte")

"saturation chamber" means a hyperbaric chamber that is equipped to permit divers to remain under pressure for an unlimited period of time; ("caisson de saturation")

"saturation diving" means diving in which the decompression procedure used allows a bottom time of unlimited duration; ("plongée à saturation")

"scientific diving" means diving performed on behalf of an educational or research institution for the purpose of collecting specimens or data for scientific use; ("plongée scientifique")

"S.C.U.B.A." means a self-contained underwater breathing apparatus; ("scaphandre autonome")

"sledding" means a diving technique in which a diver who uses S.C.U.B.A. and a dive sled is pulled through water by a vessel; ("technique de la luge")

"stage" means a device used to lower or raise a diver to or from an underwater work site but does not include an open (wet) bell, a submersible compression chamber, an atmospheric diving system or a man basket; ("ascenseur")

"standby diver" means a diver who is present at the dive site or in a submersible compression chamber and is prepared to rescue a submerged diver should rescue become necessary; ("plongeur de soutien")

"submersible compression chamber" means a hyperbaric chamber that has the capacity to transport divers at pressures greater than one

atmosphere from the surface to an underwater work site and back; (“tourelle”)

“surface-supplied diving” means diving where the diver is supplied with a breathing mixture through an umbilical bundle, whether or not an open (wet) bell or a submersible compression chamber is used; (“plongée non autonome”)

“umbilical bundle” means a composite of hoses, wires and cables designed to supply services, such as breathing mixtures, power, heat and communications, from the surface to a diver, to an open (wet) bell or to a submersible compression chamber; (“ombilical”)

“underwater work site” means the underwater location where work is performed; (“lieu de travail sous-marin”)

“UXO diving operation” means a diving operation involving searching for, locating, accessing, identifying, diagnosing, limiting damage from, recovering, or finally disposing of underwater unexploded explosive ordnance or munitions; (“opération de plongée liée aux UXO”)

“water control structure” includes dams, head gates, stop logs, turbine intake gates and pump intake gates. (“structure de régulation des eaux”) O. Reg. 629/94, s. 1; O. Reg. 32/14, s. 1.

PART II GENERAL

APPLICATION

- 2.** (1) This Regulation applies in relation to,
- (a) any diving operation; and
 - (b) any function in support of a diving operation. O. Reg. 629/94, s. 2 (1).
- (2) Despite subsection (1), this Regulation does not apply in relation to,
- (a) recreational diving, including any diving operation whose purpose is to train people for recreational diving;
 - (b) any diving operation in which the only underwater breathing equipment used is snorkelling equipment;
 - (c) a dive the sole purpose of which is to respond to an unforeseen emergency situation involving imminent danger to the life, health or safety of any person, if the dive is undertaken voluntarily; or
 - (d) any function in support of a diving operation described in clause (a)

or (b) or any dive described in clause (c). O. Reg. 629/94, s. 2 (2); O. Reg. 155/04, s. 1.

(3) For the purposes of clause (2) (c), a dive is not undertaken voluntarily if it is related to a diving operation in relation to which the diver is paid. O. Reg. 629/94, s. 2 (3)

METHOD OF GIVING NOTICE TO MINISTRY

3. (1) In this section,

“Form” means the form available from the Ministry entitled “Notice of Diving Operation”. O. Reg. 32/14, s. 2.

(2) Written notice required by this Regulation shall be given by completing the Form and,

- (a) delivering it to the address specified on the Form;
- (b) faxing it to the number specified on the Form; or
- (c) sending it as otherwise specified on the Form. O. Reg. 32/14, s. 2.

(3) Oral notice required by this Regulation shall be given by telephoning the number specified on the Form. O. Reg. 32/14, s. 2.

EQUIVALENCY

4. (1) An employer, owner, constructor or diving supervisor may vary a procedure required by this Regulation or a composition, design, size or arrangement of a material, object, device or thing required by this Regulation if,

- (a) the varied procedure, composition, design, size or arrangement affords protection for the health and safety of workers that is at least equal to the protection that would otherwise be afforded; and
- (b) written notice of the variance has been given to the joint health and safety committee or the health and safety representative, if any, and to the Ministry. O. Reg. 32/14, s. 3.

(2) Subsection (1) does not apply in respect of any requirement in the Act or this Regulation to give notice. O. Reg. 629/94, s. 4 (2).

DUTIES OF EMPLOYERS, CONSTRUCTORS AND OWNERS

4.1 (1) In this section,

“Standard” means CSA Standard Z275.4-12, “Competency Standard for diving, hyperbaric chamber, and remotely operated vehicle operations”.

O. Reg. 32/14, s. 4.

(2) An employer shall ensure that every person who participates in a diving operation meets the competency requirement applicable to the type of diving operation being participated in as set out in the Standard. O. Reg. 32/14, s. 4.

(3) For the purposes of subsection (2) and despite Clause 1.5 of the Standard, the Standard applies to scientific diving as defined in section 1 of this Regulation. O. Reg. 32/14, s. 4.

(4) For the purposes of subsection (2) and despite Clause 5.1 of the Standard, Clause 5 of the Standard applies to aquarium exhibit divers using S.C.U.B.A. to the maximum depth of the aquarium facility. O. Reg. 32/14, s. 4.

(5) For the purposes of subsection (2), Clause 5.8.1 of the Standard applies to aquarium exhibit divers for work performed at an aquarium facility. O. Reg. 32/14, s. 4.

(6) For the purposes of subsection (2) and despite Clause 5.8.2 of the Standard, an aquarium exhibit diver shall complete 25 dives and 15 hours of bottom time at an aquarium facility to fulfil the in-water training requirement. O. Reg. 32/14, s. 4.

(7) For the purposes of subsection (2), Clauses 32 and 33 of the Standard do not apply. O. Reg. 32/14, s. 4.

5. (1) Each constructor of a project where a diving operation is to take place, each employer associated with a diving operation and each owner associated with a diving operation shall ensure that the Ministry is given notice of the diving operation. O. Reg. 629/94, s. 5 (1).

(2) Except as provided in subsections (3) and (3.1), notice under subsection (1) shall be given,

(a) in writing at least 24 hours before the diving operation begins; or

(b) orally at least 24 hours before the diving operation begins and in writing within five days after the day on which the diving operation begins. O. Reg. 32/14, s. 5 (1).

(3) If a mixed gas is expected to be used in the diving operation other than in a diving operation involving emergency recovery, inspection or repair, notice shall be given in writing at least 24 hours before the diving operation begins. O. Reg. 32/14, s. 5 (1).

(3.1) In the event of an emergency recovery, inspection or repair,

(a) oral notice shall be given to the Ministry before any diving

equipment is moved to the dive site; and

(b) written notice shall be given to the Ministry within five days after the day on which the diving operation begins. O. Reg. 32/14, s. 5 (1).

(4) Written notice under subsection (1) shall include the following:

1. Information sufficient to permit an inspector to locate the dive site.
2. The expected starting date and duration of the diving operation.
3. The dates when and times of day during which the diving operation is expected to be carried out.
4. The name, mailing address and telephone number of an owner, constructor or employer who is associated with the diving operation.
5. The names of all diving supervisors for the diving operation appointed under section 6.
6. The expected maximum depth of any dive in the diving operation.
7. A description of the tasks expected to be performed in the diving operation.
8. The breathing mixtures expected to be used in the diving operation.
9. A statement whether the diving operation is to be offshore or onshore.
10. A statement whether recirculating S.C.U.B.A. is to be used in the diving operation.
11. A statement whether the diving operation is one to which Part XI applies. O. Reg. 629/94, s. 5 (4); O. Reg. 32/14, s. 5 (2, 3).

(5) Oral notice under subsection (1) shall include the following:

1. Information sufficient to permit an inspector to locate the dive site.
2. The expected starting date and duration of the diving operation.
3. The dates when and times of day during which the diving operation is expected to be carried out.
4. The name, mailing address and telephone number of an owner, constructor or employer who is associated with the diving operation.
5. A statement whether the diving operation is to be offshore or

onshore. O. Reg. 629/94, s. 5 (5).

(6) Each person responsible for ensuring that notice of a diving operation is given under subsection (1) shall also ensure that prior oral notice is given to the Ministry of any departure from the plans described in the notice under subsection (1). O. Reg. 32/14, s. 5 (4).

(7) Notice under subsection (6) shall be given as soon as reasonably possible. O. Reg. 32/14, s. 5 (4).

6. Each person responsible for ensuring that notice of a diving operation is given under subsection 5 (1) shall also ensure,

- (a) that one or more competent persons are appointed as diving supervisors for the diving operation; and
- (b) that one of the persons appointed under clause (a) is present at the dive site and is acting as diving supervisor whenever the diving operation is being carried out. O. Reg. 629/94, s. 6; O. Reg. 32/14, s. 6.

7. (1) Each person responsible for ensuring that notice of a diving operation is given under subsection 5 (1) shall also ensure that a written operational plan and a written contingency plan for the diving operation are prepared, with input from one or more of the diving supervisors appointed for the diving operation under section 6. O. Reg. 629/94, s. 7 (1).

(2) An operational plan shall,

- (a) describe the tasks to be performed in the diving operation;
- (b) state how the tasks referred to in clause (a) are to be performed;
- (c) state how the hazards that could be encountered in the diving operation are to be identified and handled; and
- (d) state which agencies, plants and facilities will be given notice under section 9. O. Reg. 629/94, s. 7 (2).

(3) A contingency plan shall,

- (a) include instructions for communicating with medical assistance in the event of an emergency;
- (b) outline emergency procedures for the evacuation of an injured diver from the dive site;
- (c) outline emergency procedures for responding to any significant failure of a component of any diving equipment;

- (d) outline emergency procedures for responding to a loss of communications with a diver;
- (e) outline emergency procedures for responding to hazardous weather or ice conditions;
- (f) outline emergency procedures for aborting a dive; and
- (g) outline emergency procedures for responding to any inability of an offshore dive site to maintain station. O. Reg. 629/94, s. 7 (3).

8. Each person responsible for ensuring that notice of a diving operation is given under subsection 5 (1) shall also ensure that each of the following is available for inspection by an inspector at the dive site whenever the diving operation is being carried out:

- 1. A copy of any written notice that has been given in respect of the diving operation under subsection 5 (1).
- 2. Where written notice has not yet been given in respect of the diving operation under subsection 5 (1), a written statement including the date of the oral notice given in respect of the diving operation and the name of the person to whom the oral notice was given.
- 3. A copy of the operational plan prepared for the diving operation under section 7.
- 4. A copy of the contingency plan prepared for the diving operation under section 7.
- 5. A copy of this Regulation.
- 6. A copy of any CSA Standard referred to in this Regulation that may apply to the diving operation. O. Reg. 629/94, s. 8; O. Reg. 32/14, s. 7.

9. (1) Each person responsible for ensuring that notice of a diving operation is given under subsection 5 (1) shall also ensure that notice of the diving operation is given to,

- (a) each law enforcement agency that,
 - (i) has responsibilities in relation to the area in which the dive site is located, and
 - (ii) would need to know about the diving operation in order to ensure that it is carried out safely and in a manner that takes into account other activities and events in the area;
- (b) each industrial plant that is within two kilometres of the dive site and might discharge effluent that would be harmful to the health

or safety of a worker associated with the diving operation; and

- (c) each water control facility, such as a hydro-electric authority, or water intake plant that is within one kilometre of the dive site. O. Reg. 629/94, s. 9 (1).

(2) For the purposes of clause (1) (a), examples of law enforcement agencies include harbour commissions, harbour masters, navigable water authorities and police departments. O. Reg. 629/94, s. 9 (2).

(3) For the purposes of subsection (1), notice is given to an agency, plant or facility when it is given to a person with control over or responsibility for the agency, plant or facility. O. Reg. 629/94, s. 9 (3).

(4) Notice under subsection (1) shall include the following:

1. Information sufficient to permit the person receiving the notice to locate the dive site.
2. The expected starting date and duration of the diving operation.
3. The dates when and times of day during which the diving operation is expected to be carried out.
4. The name, mailing address and telephone number of an owner, constructor or employer who is associated with the diving operation. O. Reg. 629/94, s. 9 (4).

(5) Notice under subsection (1) shall be given at least 24 hours before the diving operation begins and may be given orally or in writing. O. Reg. 32/14, s. 8.

(6) Despite subsection (5), notice may be given less than 24 hours before the diving operation begins in the case of an emergency. O. Reg. 32/14, s. 8.

10.,-11. Revoked: O. Reg. 428/21, s. 1.

DUTIES OF DIVING SUPERVISORS

12. (1) The diving supervisor for a diving operation shall have proof of his or her training and his or her diving log book or equivalent statement of diving experience at the dive site and available for inspection by an inspector. O. Reg. 32/14, s. 11 (1).

(2) The diving supervisor for a diving operation shall be present at the dive site and shall be in direct control of the diving operation whenever the diving operation is being carried out. O. Reg. 629/94, s. 12 (2); O. Reg. 32/14, s. 11 (2).

- (3) The diving supervisor for a diving operation shall,
- (a) ensure that the operational plan and the contingency plan for the diving operation are followed;
 - (b) brief the workers associated with the diving operation on the operational plan, the contingency plan and the procedures to be followed during the diving operation;
 - (c) ensure that each diver participating in the diving operation is competent and fit to perform the work;
 - (d) ensure that each diver has his or her diving log book at the dive site and available for inspection by an inspector;
 - (e) immediately before each dive, review the nature of the hazards that could be encountered in the underwater work site and brief divers on those hazards;
 - (f) ensure that any diving equipment to be used in the diving operation is examined by a competent person at least once on each day on which it is to be used, before the use, and is tested and repaired as appropriate;
 - (g) ensure that, whenever the diving operation is being carried out, adequate warning devices are displayed to indicate the area around the dive site that is to be kept clear of any equipment other than that associated with the diving operation;
 - (h) except in the case of a health or safety emergency, ensure that a diver is not permitted to remain at any depth longer than the maximum time planned for the depth of the dive;
 - (i) supervise all decompression and therapeutic recompression in strict accordance with adequate decompression procedures and tables;
 - (j) terminate or interrupt the diving operation if continuing the operation may endanger the health or safety of any worker. O. Reg. 629/94, s. 12 (3); O. Reg. 32/14, s. 11 (3).
- (4) The diving supervisor for a diving operation shall supervise the standby divers associated with the diving operation and, in particular, shall,
- (a) ensure that an adequate number of standby divers are present and properly positioned at the dive site or submersible compression chamber so that each submerged diver can be reached as quickly as possible in the event that he or she needs to be rescued;

- (b) ensure that no person is permitted to act as a standby diver unless he or she is adequately trained, having regard to the depths and circumstances in which the standby diver would have to operate should a rescue become necessary;
 - (c) ensure that each standby diver is adequately dressed and has adequate diving and communication equipment checked, ready and at hand, having regard to the depths and circumstances in which the standby diver would have to operate should a rescue become necessary;
 - (d) ensure that each standby diver is equipped with a lifeline or umbilical bundle that is at least 10 feet longer than the lifeline of any submerged diver the standby diver might need to rescue;
 - (e) ensure that no standby diver is assigned any duties other than,
 - (i) duties of standby diver,
 - (ii) where the standby diver is also acting as diving supervisor, duties of diving supervisor, and
 - (iii) duties of communicating with a submerged diver; and
 - (f) ensure that no standby diver dives or leaves the submersible compression chamber except in the event of a health or safety emergency.
- (g)-(i) REVOKED: O. Reg. 32/14, s. 11 (5);

O. Reg. 629/94, s. 12 (4); O. Reg. 32/14, s. 11 (4, 5).

- (5) The diving supervisor for a diving operation shall supervise the divers' tenders associated with the diving operation and, in particular, shall,
- (a) ensure that a diver's tender is acceptable to each diver to be tended by him or her;
 - (b) ensure that no diver's tender is assigned to any duties other than,
 - (i) duties of diver's tender, and
 - (ii) where the diver's tender is also acting as diving supervisor, duties of diving supervisor;
 - (iii) REVOKED: O. Reg. 32/14, s. 11 (6).
 - (c) ensure that no person is permitted to act as a diver's tender unless he or she meets the competency requirement applicable to the

type of diving operation being participated in as set out in Clause 7 of CSA Standard Z275.4-12, "Competency Standard for diving, hyperbaric chamber, and remotely operated vehicle operations". O. Reg. 629/94, s. 12 (5); O. Reg. 32/14, s. 11 (6, 7).

(6) Except in the event of a health or safety emergency, a person acting as a diving supervisor for a diving operation shall not dive. O. Reg. 32/14, s. 11 (8).

(7) REVOKED: O. Reg. 32/14, s. 11 (8).

DUTIES OF DIVERS AND STANDBY DIVERS

13. (1) Before participating in a diving operation, a diver or standby diver shall ensure that he or she,

- (a) understands the operational plan and the contingency plan for the diving operation;
- (b) is aware of the hazards that could be encountered in the underwater work site;
- (c) has his or her diving log book at the dive site and available for inspection by an inspector;
- (d) has undergone a medical examination in accordance with section 32;
- (e) has a physician's statement, obtained in accordance with section 32, at the dive site and available for inspection by an inspector;
- (f) is not fatigued; and
- (g) is not impaired in his or her diving ability because of consumption of alcohol or drugs.

(h) REVOKED: O. Reg. 32/14, s. 12 (1).

O. Reg. 629/94, s. 13 (1); O. Reg. 32/14, s. 12 (1).

(2) A diver or standby diver who is unfit to dive shall promptly inform the diving supervisor of that fact and shall refrain from diving or from acting as standby diver. O. Reg. 629/94, s. 13 (2).

(3) Immediately before diving, while at the dive site, a diver or standby diver shall check that he or she has all the necessary personal diving equipment and that it is all functioning properly. O. Reg. 629/94, s. 13 (3).

(4) At the onset of any sign of equipment malfunction or distress on the part of any submerged diver, a diver shall, if possible, notify the diver's tender, the diving supervisor and any diving partner and terminate the

dive. O. Reg. 629/94, s. 13 (4).

(5) On completion of any dive for which this Regulation does not require decompression, a diver, other than an atmospheric diving system operator, shall remain under observation in the presence of the diving supervisor for a period set by the diving supervisor. O. Reg. 629/94, s. 13 (5).

(6) On completion of any dive for which this Regulation requires decompression, a diver, other than an atmospheric diving system operator, shall remain under observation at the dive site for at least one hour. O. Reg. 629/94, s. 13 (6).

(7) Where the diving supervisor is of the opinion that, because of the nature of a dive to which subsection (6) applies, a diver should remain under observation for a period longer than one hour, the diver shall remain under observation at the dive site for such longer period as the diving supervisor sets. O. Reg. 629/94, s. 13 (7).

(8) A diver, other than an atmospheric diving system operator, shall not fly at an altitude greater than 1,000 feet above the dive site during,

- (a) the 12-hour period following a no-decompression dive;
 - (b) the 24-hour period following an air dive requiring decompression;
 - (c) the 24-hour period following a mixed gas dive requiring decompression with a bottom time of less than two hours;
 - (d) the 48-hour period following a mixed gas dive requiring decompression with a bottom time of two hours or longer;
 - (e) the 72-hour period following a saturation dive; and
 - (f) any period set by an attending physician following treatment for decompression sickness. O. Reg. 629/94, s. 13 (8).
- (9) A standby diver shall ensure that he or she,
- (a) does not dive or leave a submersible compression chamber except in the event of a health or safety emergency;
 - (b) does not perform any duties other than,
 - (i) duties of standby diver,
 - (ii) where he or she is also acting as diving supervisor, duties of diving supervisor, and
 - (iii) duties of communicating with a submerged diver; and
 - (c) is adequately dressed and has adequate diving and communication

equipment checked, ready and at hand, having regard to the depths and circumstances in which the standby would have to operate should a rescue become necessary. O. Reg. 629/94, s. 13 (9); O. Reg. 32/14, s. 12 (2).

(10) REVOKED: O. Reg. 32/14, s. 12 (3).

DUTIES OF DIVER'S TENDERS

14. A diver's tender shall ensure that he or she does not perform any duties other than,

- (a) tending a diver's lifeline;
- (b) providing tools and equipment to a diver;
- (c) operating a compressor and associated equipment; and
- (d) where he or she is also acting as a diving supervisor, performing the duties of diving supervisor. O. Reg. 32/14, s. 13.

PART III EQUIPMENT

DIVING EQUIPMENT — GENERAL

15. (1) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that all diving equipment to be used in the diving operation is adequate. O. Reg. 629/94, s. 15 (1).

(2) Without limiting the generality of subsection (1), each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that all diving equipment to be used in the diving operation,

- (a) is of sound construction and adequate strength and is free from patent defects;
- (b) is adequately maintained;
- (c) is tested and repaired by a competent person in accordance with the manufacturer's recommended procedures; and
- (d) is constructed in a way that ensures against malfunctions caused by low air or water temperatures or by the expansion of air or gas. O. Reg. 629/94, s. 15 (2).

(3) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that all written material necessary for adequate dive site maintenance and operation of all diving

equipment to be used in the diving operation is available at the dive site. O. Reg. 629/94, s. 15 (3).

(4) For the purposes of subsection (3), examples of written material include operation manuals, field manuals, maintenance manuals, alerts and safety checklists. O. Reg. 629/94, s. 15 (4).

(5) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any compressed gas cylinder to be used in the diving operation is hydrostatically tested and visually inspected in accordance with the CSA Standard Z275.2-11, "Occupational Safety Code for Diving Operations". O. Reg. 629/94, s. 15 (5); O. Reg. 32/14, s. 14.

PERSONAL DIVING EQUIPMENT

16. (1) A diver participating in a diving operation and the diving supervisor for the diving operation shall ensure that the diver is adequately equipped. O. Reg. 629/94, s. 16 (1).

(2) A standby diver participating in a diving operation and the diving supervisor for the diving operation shall ensure that the standby diver is adequately equipped. O. Reg. 629/94, s. 16 (2).

(3) Without limiting the generality of subsection (1), a diver, other than an atmospheric diving system operator, participating in a diving operation and the diving supervisor for the diving operation shall ensure that the diver is equipped with,

- (a) a knife that is adequately strong and sharp;
- (b) adequate weights;
- (c) an adequate diving suit or, where a diving suit is not necessary because of the circumstances of the dive, other adequate protective clothing; and
- (d) a five-point diving harness that meets the requirements of Clause 8.3.5 of CSA Standard Z275.2-11, "Occupational Safety Code for Diving Operations". O. Reg. 629/94, s. 16 (3); O. Reg. 32/14, s. 15 (1).

(4) Clauses (3) (a) and (d) do not apply to an aquarium exhibit diver. O. Reg. 32/14, s. 15 (2).

DIVE SITE EQUIPMENT

17. (1) The diving supervisor for a diving operation shall ensure that, whenever diving is in progress, the dive site is adequately equipped. O. Reg. 629/94, s. 17 (1).

(2) Without limiting the generality of subsection (1), the diving supervisor for a diving operation shall ensure, whenever diving is in progress, that the dive site is equipped with,

- (a) an oxygen system capable of administering an adequate quantity of 100 per cent pure oxygen to an injured diver until the diver is under the care of a paramedic, physician or other person who,
 - (i) is qualified to determine whether the diver requires continued oxygen,
 - (ii) has a source of 100 per cent pure oxygen, and
 - (iii) is capable of continuing to administer oxygen if required;
- (b) a first-aid kit that is adequate having regard to the nature and circumstances of the diving operation;
- (c) a set of adequate decompression tables;
- (d) where appropriate because of temperature conditions, an adequate climate-controlled facility for the use of workers that is located at or adequately near to the dive site;
- (e) an adequate two-way communication system connecting the dive site with medical assistance;
- (f) adequate means to facilitate the entry and exit of divers to and from the water;
- (g) adequate means to facilitate the immediate exit from the water of an unconscious diver; and
- (h) any other equipment that may be required to protect the health and safety of workers, having regard to the nature and circumstances of the diving operation. O. Reg. 629/94, s. 17 (2); O. Reg. 32/14, s. 16 (1).

(2.1) For the purposes of clause (2) (f), a ladder is not an adequate means to facilitate the entry and exit of divers to and from the water if the dive site is located more than five metres above the water. O. Reg. 32/14, s. 16 (2).

(3) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that the dive site is of sufficient size to accommodate all workers and equipment needed for the diving operation without overcrowding. O. Reg. 629/94, s. 17 (3).

(4) Where a diving operation is to be conducted from an offshore dive site, each employer associated with the diving operation and the diving

supervisor for the diving operation shall ensure that, whenever there are workers present at the dive site,

- (a) there are at least two adequate means of evacuating workers from the dive site; or
 - (b) a vessel equipped with an adequate primary motor and an adequate back-up motor is available at the dive site as a means of evacuating workers from the dive site. O. Reg. 629/94, s. 17 (4); O. Reg. 32/14, s. 16 (3).
- (5) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any vessel used in the diving operation is capable of maintaining station or of being anchored or moored without risk to any diver. O. Reg. 629/94, s. 17 (5).

LIFELINES

18. (1) The diving supervisor for a diving operation shall ensure that an adequate lifeline or strength member is attached to each diver participating in the diving operation when the diver is in the water. O. Reg. 32/14, s. 17.

(2) Subsection (1) does not apply to an atmospheric diving system operator or an aquarium exhibit diver. O. Reg. 32/14, s. 17.

(3) Without limiting the generality of subsection (1), the diving supervisor for a diving operation shall ensure that any lifeline or strength member used in the diving operation,

- (a) is free of knots or splices, other than knots or splices necessary to attach the lifeline or strength member to the diver and to the dive site or submersible compression chamber;
- (b) has a breaking strength of not less than 907 kilograms;
- (c) is securely attached to the diver's harness by a device that has a breaking strength of not less than 907 kilograms;
- (d) is no longer than is required to perform the work;
- (e) is securely attached to the dive site or submersible compression chamber, if the diver is using surface-supplied diving techniques;
- (f) is securely attached to the dive site or to a float visible to the diver's tender, if the diver is using S.C.U.B.A.;
- (g) is tended at all times by a diver's tender continuously holding the umbilical bundle, if the diver is working at a location where,
 - (i) differential pressure hazards may exist,

- (ii) strong currents exist,
 - (iii) the diver may fall into deeper depth, or
 - (iv) liveboating is in progress;
- (h) is tended by an in-water diver's tender during penetration dives, if line pull signals are not effective or if the diver cannot be pulled to the surface without danger of entanglement;
- (i) is tended at all times by a diver's tender continuously holding the lifeline or, in the case of a lifeline attached to a float, continuously observing the float, if the diver is using S.C.U.B.A.;
- (j) is tended at all times by a standby diver continuously holding the umbilical bundle, if the diver is operating from a submersible compression chamber; and
- (k) is incorporated in the umbilical bundle, if the diver is using an umbilical bundle. O. Reg. 32/14, s. 17.
- (4) Despite subsection (1), a diving supervisor may permit a diver to operate untethered if,
- (a) the diver is a police diver searching for and disposing of explosives;
 - (b) the diver is working in accordance with the requirements of Clause 4.5 of CSA Standard Z275.6-11, "Unexploded Explosive Ordnance (UXO) and Munitions Diving"; or
 - (c) the diver is a police diver using a dive sled that is outfitted with an adequate diver locating device. O. Reg. 32/14, s. 17.

COMMUNICATIONS

19. (1) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that each submerged diver, other than an aquarium exhibit diver, is connected to the dive site by a two-way communication system that is adequate and that meets the requirements of subsections (2) to (5). O. Reg. 32/14, s. 18 (1).

(2) Subject to subsection (3), the two-way communication system may be by voice or by pre-arranged line signals. O. Reg. 629/94, s. 19 (2).

(3) The two-way communication system must be by voice where,

- (a) the depth of the dive exceeds 100 feet;
- (b) a diver uses any power tool, explosive, burning equipment or welding equipment;
- (c) a diver directs the use of any hoisting device to place any materials

underwater while the diver is underwater;

- (d) a diver works in or near a pipe, tunnel, duct, underwater intake or other confined space or in or near a water control structure;
- (e) a diver places any materials underwater in a way that poses a risk to the health or safety of the diver;
- (f) an atmospheric diving system is used;
- (g) an open (wet) bell is used;
- (h) a submersible compression chamber is used;
- (i) the diving operation is one to which Part XI applies; or
- (j) during sledding, nothing underwater interferes with through-water voice communication. O. Reg. 629/94, s. 19 (3); O. Reg. 32/14, s. 18 (2, 3).

(4) For the purposes of clause (3) (d), a diver works near a thing where the proximity of the thing to the diver poses a health or safety risk to the diver. O. Reg. 629/94, s. 19 (4).

(5) The two-way voice communication system must,

- (a) afford sound reproduction that enables the diver's breathing to be heard clearly; and
- (b) where a breathing mixture containing helium or any other gas that significantly distorts voice transmission is used, unscramble voices effectively. O. Reg. 629/94, s. 19 (5).

(6) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that,

- (a) all communication through a two-way voice communication system used for a dive to a depth greater than 165 feet or for a dive using an atmospheric diving system is continuously recorded; and
- (b) the recordings referred to in clause (a) are saved for at least 48 hours after they are made. O. Reg. 629/94, s. 19 (6).

(7) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that each submerged diver operating at a depth greater than 100 feet is connected to the dive site by an adequate back-up two-way communications system that is independent of the primary communications system required by subsection (1). O. Reg. 629/94, s. 19 (7).

(8) Each employer associated with a diving operation and the diving

supervisor for a diving operation shall ensure that any atmospheric diving system or submersible compression chamber used in a diving operation is provided with an adequate back-up two-way communications system that is independent of the primary communications system required by subsection (1). O. Reg. 629/94, s. 19 (8).

CRANES AND HOISTING DEVICES

20. (1) Where a crane or other hoisting device is used to lower a stage or man basket carrying a diver into the water, each employer associated with the diving operation and the diving supervisor for the diving operation shall ensure that,

- (a) the crane or other hoisting device remains available throughout the dive for the immediate recovery of the diver if required in the event of an emergency; and
- (b) except in the event of an emergency, all directions to the operator of the crane or other hoisting device are given, throughout the dive, by the diver, the diver's tender or the diving supervisor. O. Reg. 629/94, s. 20 (1); O. Reg. 32/14, s. 19 (1).

(2) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that a diver who is being lowered in a stage or man basket into the water by means of a crane or other hoisting device is continuously able to communicate with the diving supervisor by using pre-arranged visual or line signals or a two-way voice communication system. O. Reg. 629/94, s. 20 (2); O. Reg. 32/14, s. 19 (2).

(3) Each employer associated with a diving operation shall ensure that any crane or other hoisting device used in a diving operation is adequate. O. Reg. 629/94, s. 20 (3).

(4) Without limiting the generality of subsection (3), each employer associated with a diving operation shall ensure that any crane or other hoisting device used in a diving operation,

- (a) is of sound construction and adequate strength and is free from patent defects;
- (b) is equipped with a failsafe mechanism that will prevent the boom from descending or telescoping in the event of a power source failure or hoisting system failure;
- (c) is equipped with a brake or mechanical locking device that is applied automatically when the control lever, handle or switch is not held in the operating position;
- (d) is equipped with brakes that can stop and hold 100 per cent of the

maximum working load with the outermost layer of wire on the drum;

- (e) is so constructed that any brakes that are power released will be applied automatically on loss of power;
- (f) is so constructed that the lowering and raising of loads is controlled by power drives that are independent of the brake mechanism;
- (g) is not fitted with a pawl-and-ratchet gear on which the pawl has to be disengaged before commencing the lowering or raising of the load; and
- (h) is constructed in a way that ensures against malfunctions at low temperatures. O. Reg. 629/94, s. 20 (4).

(5) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any crane or other hoisting device to be used in the diving operation is adequately maintained and is examined by a competent person at least once on each day on which it is to be used. O. Reg. 629/94, s. 20 (5).

(6) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any cable used with a crane or other hoisting device in the diving operation is used in accordance with the Code for Cable, Slings and Rigging, dated July 4, 1994 and issued by the Ministry. O. Reg. 629/94, s. 20 (6).

(7) Where a crane or other hoisting device is used to lower a submersible compression chamber or atmospheric diving system into the water, each employer associated with the diving operation and the diving supervisor for the diving operation shall ensure that, except in the event of an emergency, all directions to the operator of the crane or other hoisting device are given, throughout the dive, by the diving supervisor. O. Reg. 629/94, s. 20 (7).

(8) Where a crane or other hoisting device is used to lower an open (wet) bell, a submersible compression chamber or atmospheric diving system into the water, each employer associated with the diving operation and the diving supervisor for the diving operation shall ensure that the crane or other hoisting device is equipped with,

- (a) a primary lifting cable that permits the chamber or system to be lowered safely to the maximum depth of the dive and to be returned safely to the surface, without undue lateral, vertical or rotational movement;
- (b) a secondary lifting cable that is,

- (i) readily available at the dive site, and
 - (ii) compatible with the secondary lifting eye or similar device.
- O. Reg. 629/94, s. 20 (8); O. Reg. 32/14, s. 19 (3).

(9) Where a crane or other hoisting device is used to lower an open (wet) bell or submersible compression chamber into the water, each employer associated with the diving operation and the diving supervisor for the diving operation shall ensure that, during any air-water interface transfer, the crane or other hoisting device is equipped with a safety rope that will, in the event of the primary cable breaking, cause the open (wet) bell or chamber to stop directly below the turbulent wave zone. O. Reg. 629/94, s. 20 (9); O. Reg. 32/14, s. 19 (4).

FALL ARREST SYSTEMS

21. (1) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that an adequate system to arrest the fall of a stage or man basket is used whenever a diver is being lowered into the water and there is a hazard that the stage or man basket might fall,

- (a) a distance of more than 10 feet;
- (b) into or onto operating machinery; or
- (c) into or onto a hazardous substance or object. O. Reg. 629/94, s. 21 (1); O. Reg. 32/14, s. 20 (1).

(2) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that the fall arrest system,

- (a) is adequately secured to a fixed support at the dive site or to a line that is securely fastened to a fixed support at the dive site;
- (b) is designed so that if the stage or man basket falls, the stage or man basket will be suspended not more than five feet below the location it occupied before the fall; and
- (c) is attached to a secondary lifting eye or similar device that is of at least the same strength as the primary lifting eye for the stage or man basket. O. Reg. 629/94, s. 21 (2); O. Reg. 32/14, s. 20 (2).

(3) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that the fixed support referred to in clause (2) (a) is capable of resisting any arrest forces in the event of a fall and is free of sharp edges that might cut or chafe the connection between the fall arrest system and the fixed support. O. Reg. 629/94, s. 21 (3).

STAGES AND OPEN (WET) BELLS

22. Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any stage or open (wet) bell used in the diving operation is designed in accordance with good engineering practice and, in the case of a stage, meets the requirements of Clause 6.12 of CSA Standard Z275.2-11, "Occupational Safety Code for Diving Operations", and in the case of an open (wet) bell, meets the requirements of Clause 6.13 of the same Standard. O. Reg. 32/14, s. 21.

HYPERBARIC CHAMBERS

23. (1) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that a hyperbaric chamber is at the dive site during any dive that exceeds,

- (a) the no-decompression limit given by the decompression tables used for the dive; or
- (b) a depth of 100 feet. O. Reg. 629/94, s. 23 (1).

(2) Subsection (1) does not apply in relation to a dive where the diver is always at one atmosphere. O. Reg. 629/94, s. 23 (2).

(3) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that a hyperbaric chamber is at the dive site during any dive where that would be reasonable in the circumstances for the protection of the diver. O. Reg. 629/94, s. 23 (3).

(3.1) Despite subsections (1) and (3), where the dive site is located on an ice surface, the hyperbaric chamber may be located on land as close as possible to the dive site. O. Reg. 32/14, s. 22 (1).

(4) Each employer associated with a diving operation shall ensure that any hyperbaric chamber used on land in the diving operation has been registered with the Technical Standards and Safety Authority, for use in Ontario. O. Reg. 629/94, s. 23 (4); O. Reg. 155/04, s. 4.

(5) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any hyperbaric chamber used in the diving operation, other than as a submersible compression chamber or saturation chamber, meets and is operated in accordance with the requirements specified in Clauses 1 to 9 of CSA Standard Z275.1-05, "Hyperbaric Facilities". O. Reg. 32/14, s. 22 (2).

(6) Each employer associated with a diving operation and the diving supervisor for a diving operation shall, in the case of a dive for which a hyperbaric chamber is used other than as a submersible compression chamber or saturation chamber, ensure that a quantity of air or adequate

mixed gas is available with the hyperbaric chamber that is twice the quantity required,

- (a) to pressurize the hyperbaric chamber to a pressure equivalent to the pressure at the greatest depth in respect of which the hyperbaric chamber is used in the dive or to the pressure at 165 feet, whichever is greater; and
- (b) to ventilate the hyperbaric chamber at this pressure. O. Reg. 629/94, s. 23 (6).

GAUGES AND METERING EQUIPMENT

24. Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any gauge or metering equipment to be used in the diving operation meets the requirements of Clause 6.2 of CSA Standard Z275.2-11, "Occupational Safety Code for Diving Operations". O. Reg. 32/14, s. 23.

PART IV BREATHING MIXTURES

GENERAL REQUIREMENTS

25. (1) The diving supervisor for a diving operation shall ensure that no diver participating in the diving operation is permitted to dive without a breathing mixture and breathing mixture supply system that are adequate, having regard to the depths and circumstances in which the diver will be operating. O. Reg. 629/94, s. 25 (1).

(2) The diving supervisor for a diving operation shall ensure that any breathing mixture used in the diving operation meets the requirements of CSA Standard Z275.2-11, "Occupational Safety Code for Diving Operations". O. Reg. 32/14, s. 24.

(3) Except for decompression or therapeutic purposes, the diving supervisor for a diving operation shall ensure that no diver participating in the diving operation is given pure oxygen as a breathing mixture unless notice is given under paragraph 10 of subsection 5 (4). O. Reg. 629/94, s. 25 (3).

(4) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any breathing mixture supply system used in the diving operation is designed to ensure that,

- (a) an interruption of the breathing mixture supply to one diver will not affect the supply of breathing mixture to any other diver; and
- (b) an interruption of the primary breathing mixture supply to a diver will not affect the delivery of breathing mixture from,

- (i) any emergency bail-out system worn by the diver,
 - (ii) any emergency reserve system worn by the diver, or
 - (iii) any secondary breathing mixture supply;
- (c) an interruption of the primary breathing mixture supply to a submersible compression chamber will not affect the delivery of breathing mixture from any emergency reserve system attached to the chamber; and
- (d) an interruption of the primary breathing mixture supply in an atmospheric diving system will not affect delivery of breathing mixture from any secondary breathing mixture supply in the atmospheric diving system. O. Reg. 629/94, s. 25 (4).

QUANTITIES OF PRIMARY AND SECONDARY BREATHING MIXTURE SUPPLIES

26. (1) The diving supervisor for a diving operation shall ensure that the total supply of breathing mixture that is available at the dive site at any time during a dive consists of,

- (a) an adequate primary supply to complete the dive as planned; and
- (b) an adequate secondary supply.

(2) The secondary supply referred to in clause (1) (b) shall at the start of a dive consist of,

- (a) in the case of a dive in which S.C.U.B.A. is used, one complete S.C.U.B.A. unit, including regulator and fully charged cylinder, in addition to the sets required for the divers and standby divers;
- (b) in the case of a dive in which surface-supplied diving techniques are used, an adequate supply of breathing mixture to allow the diver to return to the surface and undergo any in-water decompression that might be required;
- (c) in the case of a dive in which a submersible compression chamber or atmospheric diving system is used, an adequate supply of breathing mixture to enable the occupants of the chamber or system to return to the surface;
- (d) in the case of a dive in which an on-line gas blender or diver's gas recovery system is used, an adequate supply of pre-mixed breathing mixture to allow the divers to return to the surface and undergo any in-water decompression that might be required; and
- (e) in the case of a dive in which a hyperbaric chamber is used, an adequate supply of breathing mixture to allow the diver to

undergo any decompression that might be required and undergo any treatment that might be required for decompression sickness. O. Reg. 629/94, s. 26.

EMERGENCY RESERVE AND BAIL-OUT SYSTEMS

- 27.** The diving supervisor for a diving operation shall ensure that,
- (a) each diver wears an adequate bailout system that meets the requirements of Clause 4.7.3 of CSA Standard Z275.2-11, "Occupational Safety Code for Diving Operations";
 - (b) every submersible compression chamber is equipped with an emergency reserve breathing gas supply that is adequate for all of the chamber's occupants for at least 24 hours;
 - (c) every submersible compression chamber is equipped with an emergency reserve breathing gas supply that can provide all lock-out divers with at least 30 minutes of breathing gas at a rate of 40 litres per minute; and
 - (d) every atmospheric diving system is equipped with an emergency reserve breathing gas supply that is adequate for all of the system's occupants for at least 48 hours. O. Reg. 32/14, s. 25.

BREATHING MIXTURES CONTAINING NITROGEN

28. Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that, when nitrogen is a component of any breathing mixture used in the diving operation, the mixture is not used at depths where the nitrogen partial pressure in the breathing mixture exceeds 4.8 bars. O. Reg. 629/94, s. 28.

PURITY OF BREATHING MIXTURES

29. Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that the purity of any breathing mixture used in the diving operation meets the requirements of CSA Standard Z275.2-11, "Occupational Safety Code for Diving Operations". O. Reg. 32/14, s. 26.

COMPRESSOR REQUIREMENTS

- 30.** Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that,
- (a) any compressor and associated equipment used in the diving operation to supply a breathing mixture meets the requirements of CSA Standard Z275.2-11, "Occupational Safety Code for Diving

Operations”; and

- (b) any compressor and associated equipment used in the diving operation is operated by a competent worker, who may be the diver’s tender. O. Reg. 32/14, s. 27.

OXYGEN SUPPLY SYSTEMS

31. Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any oxygen supply system used in the diving operation meets the requirements of CSA Standard Z275.2-11, “Occupational Safety Code for Diving Operations”. O. Reg. 32/14, s. 28.

PART V MEDICAL PROCEDURES

MEDICAL EXAMINATIONS

32. (1) No person shall dive, other than as an atmospheric diving system operator, unless he or she,

- (a) if under 40 years of age, has undergone a medical examination to determine fitness to dive during the 24-month period preceding the dive or during such shorter period preceding the dive as has been recommended by the person’s examining physician;
- (b) if 40 years of age or older, has undergone a medical examination to determine fitness to dive during the 12-month period preceding the dive or during such shorter period preceding the dive as has been recommended by the person’s examining physician; and
- (c) has obtained a written statement from the examining physician who performed the most recent medical examination that indicates the diver is fit to dive or fit to dive with limitations. O. Reg. 32/14, s. 29.

(2) A medical examination under subsection (1) shall,

- (a) be performed by a physician who is knowledgeable about diving medicine and hyperbaric medicine; and
- (b) be performed in accordance with the Code for the Medical Examination of Divers, dated October 2013 and issued by the Ministry. O. Reg. 32/14, s. 29.

(3) No person shall dive as an atmospheric diving system operator unless he or she,

- (a) if under 40 years of age, has undergone a medical examination to determine fitness to operate an atmospheric diving system during

the 24-month period preceding the dive or during such shorter period preceding the dive as has been recommended by the person's examining physician;

- (b) if 40 years of age or over, has undergone a medical examination to determine fitness to operate an atmospheric diving system during the 12-month period preceding the dive or during such shorter period preceding the dive as has been recommended by the person's examining physician; and
- (c) has obtained a written statement from the examining physician that indicates that the diver is fit to operate an atmospheric diving system or fit to operate an atmospheric diving system with limitations. O. Reg. 32/14, s. 29.

(4) A written statement under clauses (1) (c) or (3) (c) shall be signed by the examining physician and shall include,

- (a) the physician's name and address;
- (b) the date of the examination; and
- (c) the recommended date for the next examination. O. Reg. 32/14, s. 29.

EMERGENCY TRAINING

33. (1) Each employer associated with a diving operation shall ensure that up-to-date certification in cardio-pulmonary resuscitation, oxygen administration and first aid is held by,

- (a) each person appointed as a diving supervisor for the diving operation;
- (b) each diver participating in the diving operation; and
- (c) whenever the diving operation is being carried out, at least one diver's tender at the dive site. O. Reg. 32/14, s. 30.

(2) For the purposes of subsection (1),

- (a) certification for cardio-pulmonary resuscitation and for first aid shall be from St. John Ambulance, the Canadian Red Cross Society or an organization that offers equivalent training; and
- (b) certification for oxygen administration for S.C.U.B.A. diving injuries shall be from the Divers Alert Network or an organization that offers equivalent training. O. Reg. 32/14, s. 30.

MEDICAL ASSISTANCE

34. Each employer associated with a diving operation shall ensure that arrangements are made with one or more physicians who are knowledgeable about diving medicine and hyperbaric medicine so that any medical advice or support that may be required is available whenever,

- (a) a dive that involves decompression is carried out; or
- (b) a dive to a depth greater than 100 feet is carried out using techniques other than those of atmospheric diving. O. Reg. 629/94, s. 34; O. Reg. 32/14, s. 31.

DECOMPRESSION PROCEDURES AND TABLES

35. The diving supervisor for a diving operation shall ensure that dives that involve decompression are carried out in accordance with adequate decompression procedures and tables. O. Reg. 629/94, s. 35.

**PART VI
S.C.U.B.A. DIVING****PROHIBITIONS ON S.C.U.B.A. USE**

36. (1) The diving supervisor for a diving operation shall ensure that S.C.U.B.A. is not used by,

- (a) a diver working near or in an operating underwater intake;
- (b) a diver working near or in a pipe, tunnel, duct or other confined space;
- (c) a diver working at a water control structure;
- (d) a diver using any power tool, hoisting device, burning equipment or welding equipment;
- (e) a diver placing any materials underwater in a way that poses a risk to the health or safety of the diver;
- (f) a diver operating at depths in excess of 100 feet;
- (g) a diver working in a diving operation to which Part XI applies;
- (h) a diver handling an explosive device, unless the diver is a police diver engaged in a diving operation, including a diving operation for training purposes, that involves searching for and disposing of explosives; or
- (i) a diver participating in a UXO diving operation, unless the diver meets the requirements of Clause 5 of CSA Standard Z275.6-11, "Unexploded Explosive Ordnance (UXO) and Munitions Diving".

O. Reg. 629/94, s. 36 (1); O. Reg. 32/14, s. 32.

(2) For the purposes of clauses (1) (a) and (b), a diver works near a thing where the proximity of the thing to the diver poses a health or safety risk to the diver. O. Reg. 629/94, s. 36 (2).

MINIMUM CREW

37. (1) Whenever S.C.U.B.A. is used, each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that,

- (a) an adequate number of diver's tenders, and in any event at least one diver's tender, is present at the dive site;
- (b) an adequate number of standby divers, and in any event at least one standby diver, is present at the dive site;
- (c) an adequate number of divers, and in any event at least one diver, is present at the dive site; and
- (d) one person does not act at the same time both as diver's tender and as standby diver for one or more divers.

(2) Whenever S.C.U.B.A. is used, the diving supervisor may also function either as a standby diver or as a diver's tender. O. Reg. 629/94, s. 37.

S.C.U.B.A. DIVING EQUIPMENT

38. (1) A diving supervisor for a diving operation using open circuit S.C.U.B.A. shall ensure that each diver uses equipment that meets the requirements of Clause 7.8.1. of CSA Standard Z275.2-11, "Occupational Safety Code for Diving Operations". O. Reg. 32/14, s. 33.

(2) Despite subsection (1), Subclause (c) of Clause 7.8.1. of CSA Standard Z275.2-11, "Occupational Safety Code for Diving Operations", does not apply to an aquarium diver. O. Reg. 32/14, s. 33.

PART VII SURFACE-SUPPLIED DIVING

MINIMUM CREW

39. (1) Whenever surface-supplied diving is being carried out, each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that,

- (a) an adequate number of diver's tenders, and in any event at least one diver's tender, is present at the dive site;

- (b) an adequate number of standby divers, and in any event at least one standby diver, is present at the dive site;
- (c) an adequate number of divers, and in any event at least one diver, is present at the dive site;
- (d) except in a health or safety emergency, there is a separate diver's tender for each diver engaged in surface-supplied diving; and
- (e) one person does not act at the same time both as a diver's tender and as a standby diver for one or more divers engaged in surface-supplied diving. O. Reg. 629/94, s. 39 (1).

(2) For the purposes of subsection (1), the diving supervisor may also function either as a standby diver or as a diver's tender. O. Reg. 629/94, s. 39 (2).

(3) Whenever a hyperbaric chamber is required by subsection 23 (1) or (3) and surface-supplied diving is being carried out, each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that,

- (a) the requirements of subsection (1) are met; and
- (b) a competent worker who does not have any duties that would interfere with his or her adequate operation of the chamber is available to operate the chamber. O. Reg. 629/94, s. 39 (3).

(4) For the purposes of subsection (3), the diving supervisor may also function as one of the following:

1. A standby diver.
2. A diver's tender.
3. A chamber operator. O. Reg. 629/94, s. 39 (4).

(5) Whenever surface-supplied diving is carried out in a diving operation to which Part X or XI applies, each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that,

- (a) the requirements of subsection (1) or (3), as the case may be, are met; and
- (b) the diving supervisor does not perform the duties of a diver's tender or a standby diver. O. Reg. 629/94, s. 39 (5); O. Reg. 32/14, s. 34.

BREATHING MIXTURE SUPPLY LINES

40. (1) The diving supervisor for a diving operation shall ensure that any breathing mixture supply line used in surface-supplied diving,

- (a) is adequate;
- (b) has an internal diameter sufficient to permit adequate flow rates and pressures;
- (c) is protected in a way that ensures against damage at the dive site; and
- (d) is protected against kinking.

(2) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that each breathing mixture supply line used in surface-supplied diving is fitted with an adequate breathing mixture supply valve.

(3) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that the breathing mixture supply valve of any diver engaged in surface-supplied diving is,

- (a) readily accessible to dive site personnel;
- (b) protected in a way that ensures against damage at the dive site;
- (c) clearly marked to permit dive site personnel to identify the diver whose breathing mixture supply it controls; and
- (d) under the care and control of a competent person.

(4) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that each breathing mixture supply line used in surface-supplied diving is fitted with an adequate pressure gauge installed,

- (a) downstream of the diver's supply valve, except where the diver's supply valve is a position indicating valve; and
- (b) in a way that permits dive site personnel a clear and unobstructed view of its dial and figures. O. Reg. 629/94, s. 40.

HELMETS, MASKS AND HOOKAH

41. (1) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any diver engaged in surface-supplied diving wears a diving helmet or full face mask or uses a hookah that meets the requirements of subsections (2) to (4).

- (2) A helmet, face mask or hookah must be,

- (a) adequate;
 - (b) fitted with an adequate non-return valve; and
 - (c) attached by a hose to an adequate emergency bail-out system that is,
 - (i) worn by the diver, and
 - (ii) not used for suit-inflation.
- (3) A helmet or mask shall be fitted with an adequate locking or fastening device.
- (4) A helmet shall be fitted with an adequate and compatible attachment system for securing and sealing the helmet in place. O. Reg. 629/94, s. 41.

PART VIII DEEP DIVING

GENERAL REQUIREMENTS

- 42.** (1) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any diver engaged in deep diving, other than atmospheric diving, is provided with an adequate breathing mixture that is mixed gas. O. Reg. 629/94, s. 42 (1).
- (2) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that deep diving is not carried out unless,
- (a) an adequate stage, downline, structure or other means is available to enable the diver to maintain the decompression stop depths and times specified in the decompression tables used for the dive without undue exertion and movement; and
 - (b) the diving supervisor has a means of,
 - (i) monitoring the depth of each diver,
 - (ii) controlling the pressures at which breathing mixtures are being supplied to each diver, and
 - (iii) analyzing the breathing mixtures being supplied to each diver.
- O. Reg. 629/94, s. 42 (2).
- (3) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that a submersible compression chamber that meets the requirements of Part IX is used to transfer personnel under pressure greater than one atmosphere to and from the underwater work site during any dive where,

- (a) bottom time exceeds 40 minutes and depth is greater than 165 feet;
- (b) bottom time exceeds 25 minutes and depth is greater than 195 feet; or
- (c) depth exceeds 230 feet. O. Reg. 629/94, s. 42 (3); O. Reg. 32/14, s. 35.

EXPOSURE LIMITS AND REST PERIODS

43. (1) The diving supervisor for a diving operation shall ensure that a diver who has engaged in deep diving using non-saturation diving techniques does not work at a pressure greater than one atmosphere during the 18-hour period immediately following completion of decompression. O. Reg. 629/94, s. 43 (1); O. Reg. 32/14, s. 36 (1).

(2) The diving supervisor for a diving operation shall ensure that a diver who has engaged in deep diving using saturation diving techniques does not work at a pressure greater than one atmosphere during the 14-day period immediately following completion of decompression, except as permitted by a physician who is knowledgeable about diving medicine and hyperbaric medicine. O. Reg. 629/94, s. 43 (2); O. Reg. 32/14, s. 36 (2).

(3) The diving supervisor for a diving operation shall ensure that a diver who has engaged in deep diving using saturation diving techniques observes the following limits:

- 1. In the case of a dive to a depth of 500 feet or less using a submersible compression chamber, no diver shall spend, seal to seal,
 - i. more than four hours in the water, or
 - ii. more than 10 hours in the submersible compression chamber.
- 2. In the case of a dive to a depth greater than 500 feet using a submersible compression chamber, no diver shall spend, seal to seal,
 - i. more than three hours in the water, or
 - ii. more than eight hours in the chamber.
- 3. A diver shall not work for at least 12 continuous hours immediately after reaching a limit set out in subparagraph i or ii of paragraph 1 or subparagraph i or ii of paragraph 2 and, in any event, a diver shall not work for at least 12 continuous hours in any 24-hour period. O. Reg. 629/94, s. 43 (3).

PART IX
SUBMERSIBLE COMPRESSION CHAMBERS, SATURATION
CHAMBERS, ATMOSPHERIC DIVING SYSTEMS AND REMOTELY-
OPERATED (UNDERWATER) VEHICLES

SUBMERSIBLE COMPRESSION CHAMBER CONSTRUCTION AND EQUIPMENT

44. Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any submersible compression chamber used in the diving operation,

- (a) meets and is operated in accordance with the requirements specified in Clauses 1 to 9 and 13 of CSA Standard Z275.1-05, "Hyperbaric Facilities";
- (b) is capable of mating to a hyperbaric chamber that meets the requirements specified in Clauses 1 to 9 and, in the case of saturation diving, Clause 12 of CSA Standard Z275.1-05, "Hyperbaric Facilities";
- (c) is adequately equipped to permit the transfer of persons under pressure into and out of a hyperbaric chamber;
- (d) is of adequate size and design to accommodate the number of occupants that it is to carry during the diving operation without overcrowding;
- (e) is designed in a way that permits divers to enter and exit the submersible compression chamber with ease;
- (e.1) is equipped with a stage or an adequate standoff;
 - (f) is designed to permit a diver to disconnect or shear the umbilical bundle of the chamber in the event of a health or safety emergency;
 - (g) is provided with an adequate mechanism for shedding ballast weights that,
 - (i) can be operated from within the chamber, and
 - (ii) is designed in a way that ensures against accidental shedding of the weights;
- (h) is equipped with,
 - (i) adequate doors and hatches that act as pressure seals and that may be opened from either side,
 - (ii) adequate valves, gauges and other fittings to control pressure within the chamber and to clearly indicate internal and

external pressures,

- (iii) adequate pressurization valves and main exhaust valves that are spring-loaded so as to close when not held in the open position,
 - (iv) adequate primary lighting equipment and emergency back-up lighting equipment,
 - (v) adequate first aid equipment,
 - (vi) adequate hoisting equipment to recover an unconscious or injured diver into the chamber,
 - (vii) adequate heating equipment,
 - (viii) adequate emergency thermal protection for all occupants,
 - (ix) an adequate emergency stroboscope light,
 - (x) an adequate emergency locating device,
 - (xi) adequate instruments to monitor temperature, oxygen and carbon dioxide levels within the chamber,
 - (xii) adequate primary and emergency carbon dioxide scrubbers,
 - (xiii) adequate hull shut-off valves on all gas and water penetrations into the chamber,
 - (xiv) a secondary lifting eye or similar device that is at least as strong as the primary lifting eye,
 - (xv) a blind port, and
 - (xvi) an adequate tool kit;
- (i) is designed in a way that ensures against inadvertent operation of the secondary breathing mixture supply system;
 - (j) is designed in a way that permits the secondary breathing mixture supply to be brought on-line from within the chamber; and
 - (k) is provided with an adequate secondary means of retrieving the submersible compression chamber if its primary support cable breaks. O. Reg. 629/94, s. 44; O. Reg. 32/14, s. 38.

SATURATION CHAMBER CONSTRUCTION AND EQUIPMENT

45. Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any saturation chamber

used in the diving operation meets and is operated in accordance with the requirements specified in Clauses 1 to 9 and 12 of CSA Standard Z275.1-05, "Hyperbaric Facilities". O. Reg. 32/14, s. 39.

ATMOSPHERIC DIVING SYSTEM CONSTRUCTION AND EQUIPMENT

46. (1) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that any atmospheric diving system used in the diving operation,

- (a) is designed to permit a diver to disconnect or shear the umbilical bundle of the system in the event of a health or safety emergency;
- (b) is provided with an adequate mechanism for shedding ballast weights that,
 - (i) can be operated from within the system, and
 - (ii) is designed in a way that ensures against accidental shedding of the weights;
- (c) is designed in a way that ensures against inadvertent operation of the secondary breathing mixture supply system;
- (d) is designed in a way that permits the secondary breathing mixture supply to be brought on-line from within the system;
- (e) is equipped with the things mentioned in subclauses 44 (h) (i), (ii), (iv), (v) and (vii) to (xvi); and
- (f) meets the requirements for registration set out in,
 - (i) Det Norske Veritas, "Rules For Certification of Diving Systems", October 2010,
 - (ii) Lloyd's Register, "Rules and Regulations For the Construction and Classification of Submersibles and Underwater Systems", 1989, Notice No. 1, July 17, 1991, or
 - (iii) American Bureau of Shipping, "Rules For Building and Classing Underwater Vehicles, Systems and Hyperbaric Facilities", 2002. O. Reg. 629/94, s. 46 (1); O. Reg. 32/14, s. 40.

(2) For the purposes of clause (1) (e), a reference in clause 44 (h) to "chamber" shall be deemed to be a reference to "system". O. Reg. 629/94, s. 46 (2).

47.-50. REVOKED: O. Reg. 32/14, s. 41.

BACK-UP ATMOSPHERIC DIVING SYSTEM

51. Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that, whenever an atmospheric diving system is used to carry out the diving operation, a back-up atmospheric diving system with adequate depth capability is available and can be deployed quickly enough to effect a rescue within 48 hours of an emergency arising. O. Reg. 629/94, s. 51.

EMERGENCY RESCUE FROM SUBMERSIBLE COMPRESSION CHAMBER

51.1 Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that there are adequate means of rescuing divers from a submersible compression chamber within 24 hours of an emergency arising. O. Reg. 32/14, s. 42.

MINIMUM CREW

52. (1) Whenever a submersible compression chamber or an atmospheric diving system is used to carry out a diving operation, each employer associated with the diving operation and the diving supervisor for the diving operation shall ensure that the number of workers at the dive site meets the number required by Clauses 9.3.4 and 9.3.5 of CSA Standard Z275.2-11, "Occupational Safety Code for Diving Operations". O. Reg. 32/14, s. 43.

(2) Whenever a submersible compression chamber or an atmospheric diving system is used to carry out a diving operation, each employer associated with the diving operation and the diving supervisor for the diving operation shall ensure that at least two divers are available at the dive site to render any in-water assistance in the launch or recovery of the chamber or system that may be needed in the event of a health or safety emergency. O. Reg. 32/14, s. 43.

REMOTELY-OPERATED (UNDERWATER) VEHICLES

52.1 (1) In this section,

"ROV" means remotely-operated (underwater) vehicle. O. Reg. 32/14, s. 43.

(2) No person shall operate an ROV near a diver unless each employer associated with the diving operation and the diving supervisor for the diving operation ensure that,

- (a) the ROV pilot is under the diving supervisor's authority;
- (b) the ROV pilot is adequately trained to operate an ROV;

- (c) high-voltage electrical connections, terminations and penetrations are clearly marked to warn divers of electrical hazards;
 - (d) electrical power to the ROV is disconnected before a diver assists with the recovery of the ROV;
 - (e) all thrusters are guarded to prevent contact with any part of a diver or a diver's umbilical bundle;
 - (f) an adequate system is provided to permit voice communication between the dive site and the ROV's control station;
 - (g) a monitor is available at the dive site showing what the ROV pilot can see; and
 - (h) the ROV maintains adequate distance from the diver while the diver ascends to the surface or returns to the submersible compression chamber. O. Reg. 32/14, s. 43.
- (3) For the purposes of subsection (2), an ROV is near a diver where the ROV's proximity to the diver poses a health or safety risk to the diver. O. Reg. 32/14, s. 43.

PART X SPECIAL HAZARDS

LIVEBOATING

53. (1) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that liveboating is not conducted,

- (a) after sunset and before sunrise;
- (b) in sea-state that poses a risk to the health or safety of a diver; or
- (c) from vessels without adequate manoeuvrability. O. Reg. 629/94, s. 53 (1); O. Reg. 32/14, s. 44 (1).

(2) The diving supervisor for a diving operation shall not permit in-water decompression procedures to be used in conjunction with liveboating unless,

- (a) a hyperbaric chamber ready for immediate use is available on the vessel used for liveboating;
- (b) an independent rope is secured to a weight or structure underwater and is connected to an adequately buoyant flotation device on the surface so that the diver can maintain position during decompression stops;
- (c) the vessel's captain has a continuous unobstructed view of the

flotation device supporting the diver's decompression line, the diver's umbilical bundle and the diver's tender by means of a remote operating station that allows adequate command of the vessel;

- (d) the vessel requires no more than one-third of its power to maintain station; and
- (e) the diving supervisor maintains contact with the diver at all times by means of a two-way voice communication system that can be heard adequately by both the captain and the diver's tender. O. Reg. 32/14, s. 44 (2).

(3) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that, whenever a diver participates in liveboating, a procedure or device that ensures against the diver's umbilical bundle becoming entangled in the propeller is employed. O. Reg. 629/94, s. 53 (3); O. Reg. 32/14, s. 44 (3).

(4) The diving supervisor for a diving operation shall ensure that any diver's tender participating in liveboating has a continuous unobstructed view of the vessel's captain. O. Reg. 629/94, s. 53 (4).

(5) Each employer associated with a diving operation shall ensure that any captain of a vessel participating in liveboating is competent to perform the duties of captain during liveboating. O. Reg. 32/14, s. 44 (4).

(6) The captain of the vessel and the diving supervisor for a diving operation shall co-operate in carrying out their responsibilities as needed to protect the health and safety of the divers. O. Reg. 629/94, s. 53 (6); O. Reg. 32/14, s. 44 (5).

SLEDDING

53.1 (1) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that sledding is not conducted,

- (a) after sunset and before sunrise;
- (b) in sea-state that poses a risk to the health or safety of a diver;
- (c) from vessels without adequate manoeuvrability; or
- (d) without either an adequate procedure or an adequate device to prevent the diver's towline from becoming entangled in the propeller. O. Reg. 32/14, s. 45.

(2) Each employer associated with a diving operation and the diving supervisor for a diving operation shall ensure that a captain of a vessel

participating in sledding is competent to perform the duties of captain during sledding. O. Reg. 32/14, s. 45.

WATER FLOW HAZARDS

54. (1) The diving supervisor for a diving operation shall ensure that diving is not conducted in hazardous water flow conditions. O. Reg. 629/94, s. 54 (1).

(2) Each employer and each owner associated with a diving operation and the diving supervisor for a diving operation shall ensure before a dive begins that any water flow that may be a hazard to a diver,

(a) is identified by using the test methods described in the 2011 “Guideline for Diving Operations on Dams and Other Worksites where Delta-P Hazards May Exist”, published by the Canadian Association of Diving Contractors; and

(b) is locked-out or controlled in a manner that,

(i) is satisfactory to the diver and the diving supervisor, and

(ii) ensures that the water flow poses no safety hazard to the diver. O. Reg. 32/14, s. 46.

(3) REVOKED: O. REG. 32/14, s. 46.

HAZARDOUS MECHANISMS

55. Each employer and each owner associated with a diving operation and the diving supervisor for a diving operation shall ensure before a dive begins that any mechanism that may be a hazard to a diver is dealt with in accordance with Clause 4.5.4 of CSA Standard Z275.2-11, “Occupational Safety Code for Diving Operations”. O. Reg. 32/14, s. 47.

FLOATING EQUIPMENT

55.1 A constructor of a project where a diving operation is to take place and each employer associated with a diving operation shall ensure that no barge, scow or vessel is moved into the vicinity of a dive site without permission from the diving supervisor while a diver is in the water. O. Reg. 32/14, s. 47.

USE OF EXPLOSIVES

56. Each employer associated with a diving operation and the diving supervisor for the diving operation shall ensure that,

(a) any transportation, handling, storage or use of explosives is carried out in a manner that does not endanger any worker;

- (b) any initiation of explosives is subject to the direct control of the diving supervisor;
- (c) the blasting initiator and its operating key or operating mechanism are kept physically separated from each other until initiation of the explosive is to take place; and
- (d) no diver is in the water when an underwater explosive is initiated.
O. Reg. 629/94, s. 56.

UXO DIVING OPERATIONS

56.1 Each employer associated with a diving operation shall ensure that all persons who participate in a UXO diving operation are trained and work in accordance with CSA Standard Z275.6-11, “Unexploded Explosive Ordnance (UXO) and Munitions Diving”, other than Clause 4.1.1 and Clauses 4.7.12.2.3 to 4.7.12.2.6 of the Standard. O. Reg. 32/14, s. 48

PART XI CONTAMINATED ENVIRONMENTS

DEFINITION

57. In this Part,

“contaminant” has the same meaning as in the *Environmental Protection Act*. O. Reg. 629/94, s. 57.

APPLICATION

58. This Part applies to,

- (a) any diving operation that poses a risk to the health or safety of a worker because it is carried out at or near the point of discharge of effluent from an industrial plant, sewage treatment plant or water treatment plant;
- (b) any diving operation that poses a risk to the health or safety of a worker because the purpose of the operation is to clean up or contain a contaminant; and
- (c) any diving operation that poses a risk to the health or safety of a worker because it is carried out at or near the site of a spill within the meaning of Part X of the *Environmental Protection Act*. O. Reg. 629/94, s. 58. O. Reg. 32/14, s. 49.

IDENTIFICATION AND PRECAUTIONS

59. (1) Each constructor of a project where a diving operation is to take place, each employer associated with a diving operation, each owner associated with a diving operation and the diving supervisor for a diving

operation shall ensure that, before any dive is begun, a competent person identifies each contaminant that is or is likely to be present during the diving operation, at or near the dive site or underwater work site, at a concentration that would pose a risk to the health or safety of a worker. O. Reg. 629/94, s. 59 (1); O. Reg. 32/14, s. 50 (1).

(2) Each constructor of a project where a diving operation is to take place, each employer associated with a diving operation and each owner associated with a diving operation shall ensure that a written contaminant management plan is prepared, with input from one or more of the diving supervisors appointed for the diving operation under section 6. O. Reg. 629/94, s. 59 (2).

(3) A contaminant management plan shall,

- (a) name the contaminants identified under subsection (1);
- (b) describe the known health or safety risks that the contaminants identified under subsection (1) pose to humans;
- (c) describe the equipment and apparel required to be used by section 60;
- (d) specify the location of the exclusion zone, contaminated reduction zone and support zone required by section 62;
- (e) outline the procedures to be followed by personnel in moving from one zone to another;
- (f) describe the special emergency measures associated with exposure to the contaminants identified under subsection (1), where appropriate; and
- (g) outline procedures for obtaining, within an adequately short time, information relating to,
 - (i) the handling of the contaminants identified under subsection (1), and
 - (ii) the administering of any emergency treatment that may become necessary as a result of exposure to a contaminant identified under subsection (1). O. Reg. 629/94, s. 59 (3); O. Reg. 32/14, s. 50 (2)

(4) The diving supervisor for the diving operation shall ensure that a copy of the plan is prominently posted at the dive site. O. Reg. 629/94, s. 59 (4).

EQUIPMENT — GENERAL

60. (1) Each employer associated with a diving operation and the diving supervisor for the diving operation shall ensure that,

- (a) adequate precautions are taken to ensure that the breathing mixture supply used is not adversely affected by a contaminant identified under subsection 59 (1);
- (b) adequate breathing equipment for surface support personnel is provided if there is a risk to their health or safety from inhaling a contaminant identified under subsection 59 (1) during the diving operation;
- (c) adequate apparel and equipment is worn to prevent exposing surface support personnel to a contaminant identified under subsection 59 (1);
- (d) an adequate means of decontaminating personnel exposed to a contaminant identified under subsection 59 (1) is provided at the dive site;
- (e) diving equipment used in the diving operation is not used in any subsequent diving operation unless it is free of all contaminants identified under subsection 59 (1); and
- (f) diving equipment that is not for reuse is adequately disposed of.

(2) The diving supervisor for the diving operation shall ensure that,

- (a) diving equipment that has been or may have been exposed to a contaminant identified under subsection 59 (1) is examined before each dive to ensure that it has not deteriorated in a way that would result, if it were used in the dive, in a worker being exposed to a contaminant identified under subsection 59 (1); and
 - (b) diving equipment that has been or may have been exposed to a contaminant identified under subsection 59 (1) is not removed from the dive site except as authorized by a competent person.
- O. Reg. 629/94, s. 60.

SURFACE-SUPPLIED DIVING

61. Each employer associated with a diving operation and the diving supervisor for the diving operation shall ensure that a diver engaged in surface-supplied diving wears, in addition to the equipment required by section 41,

- (a) an adequate diving helmet designed to protect divers from exposure to contaminants; and

- (b) an adequate, totally enclosed diving suit that mates to the helmet with a positive seal and locking device and that does not permit contact between the contaminated environment and the diver. O. Reg. 629/94, s. 61.

WORK ZONES

62. (1) Each employer associated with a diving operation and the diving supervisor for the diving operation shall ensure that the dive site has a clearly marked contamination reduction zone that is adequately designed and equipped to permit,

- (a) personnel who have been or may have been exposed to a contaminant identified under subsection 59 (1) to dress and undress; and
- (b) equipment and personnel that have been or may have been exposed to a contaminant identified under subsection 59 (1) to be cleaned. O. Reg. 629/94, s. 62 (1).

(2) Each employer associated with a diving operation and the diving supervisor for the diving operation shall ensure that the dive site has a clearly marked support zone that is adequately designed and equipped to permit the further cleaning or the disposal of equipment that has been or may have been exposed to a contaminant identified under subsection 59 (1). O. Reg. 629/94, s. 62 (2).

(3) Each employer associated with a diving operation and the diving supervisor for the diving operation shall ensure that the dive site has a clearly marked exclusion zone that is adequately designed and equipped for the purpose set out in subsection (4). O. Reg. 629/94, s. 62 (3).

(4) Each employer associated with a diving operation and the diving supervisor for the diving operation shall ensure that all handling of contaminants identified under subsection 59 (1) that occurs at the dive site and that is not of a sort described in subsection (1) or (2) shall occur in the exclusion zone. O. Reg. 629/94, s. 62 (4); O. Reg. 32/14, s. 51.

- (5) The diving supervisor for the diving operation shall ensure that,
 - (a) no person enters the exclusion zone unless he or she is wearing adequate personal protective equipment;
 - (b) personnel enter and leave the exclusion zone only through the contamination reduction zone or the support zone;
 - (c) no person cleans contaminated equipment in the contamination reduction zone or the support zone unless he or she is wearing adequate personal protective clothing;

- (d) no food, drink or tobacco is taken into, left or consumed in the contamination reduction zone, the support zone or the exclusion zone; and
- (e) no person enters the contamination reduction zone, the support zone or the exclusion zone without the authorization of the diving supervisor. O. Reg. 629/94, s. 62 (5).

PART XII DIVING RECORDS

DIVER'S LOGBOOK

63. (1) No person shall dive in a diving operation unless he or she has a diving log book that,

- (a) is permanently bound;
- (b) has numbered pages;
- (c) contains the diver's signature and photograph;
- (d) has attached to it or entered into it a record of any qualifications obtained by the diver that relate to diving; and
- (e) has attached to it or entered into it a record of the certification referred to in section 33

(2) Each person who dives in a diving operation shall make an entry, in accordance with subsections (4) to (7), in the diving log book in respect of each dive, each medical recompression and each hyperbaric exposure carried out or undergone by the person in connection with the diving operation.

(3) No person shall dive in a diving operation unless he or she has made an entry, in accordance with subsections (6) and (7), in the diving log book in respect of any dive of a type described in clause 2 (2) (a), (c) or (d) that the person carried out during the 48 hours preceding the dive that is part of a diving operation.

(4) Entries under subsection (2) shall be made within 48 hours of the dive, medical recompression or hyperbaric exposure and shall appear in the log book in chronological order.

(5) An entry under subsection (2) in respect of a dive shall be signed by the diving supervisor and an entry under subsection (2) in respect of a medical recompression or a hyperbaric exposure shall be signed by the diving supervisor or presiding physician.

- (6) An entry under subsection (2) or (3) in respect of a dive shall state,
 - (a) the type of diving equipment used;
 - (b) the breathing mixture used;
 - (c) the time the diver left the surface;
 - (d) the maximum depth attained;
 - (e) the time the diver left the bottom;
 - (f) the time the diver reached the surface;
 - (g) the time of the surface interval, if a repetitive dive was undertaken;
 - (h) the decompression table used;
 - (i) the date;
 - (j) any unusual incidents; and
 - (k) the environmental conditions.

(7) In addition, an entry under subsection (2) or (3) in respect of a dive originating from a submersible compression chamber or other submerged base shall state,

- (a) the depth at the base;
- (b) the maximum and minimum depths attained; and
- (c) the duration of the excursions from the base.

(8) A person who is required to have a diving log book shall retain the log book for five years after the date of the last entry in it. O. Reg. 629/94, s. 63.

DAILY RECORD

64. (1) The diving supervisor for a diving operation shall make a record in accordance with subsections (2) to (4) in respect of each day of the diving operation. O. Reg. 629/94, s. 64 (1).

(2) A daily record shall include an entry in respect of each dive undertaken during the day, stating,

- (a) the type of diving equipment used;
- (b) whether a hyperbaric chamber was used;
- (c) the breathing mixture used;
- (d) the time the diver left the surface;

- (e) the maximum depth attained;
 - (f) the time the diver left the bottom;
 - (g) the time the diver reached the surface;
 - (h) the time of the surface interval, if a repetitive dive was undertaken;
 - (i) the decompression table used;
 - (j) the name of the diver;
 - (k) the name of the tenders;
 - (l) the name of the standby diver;
 - (m) any unusual incidents;
 - (n) the location of the dive site;
 - (o) the environmental conditions;
 - (p) the purpose of the dive; and
 - (q) any underwater work site hazards. O. Reg. 629/94, s. 64 (2).
- (3) A daily record shall also include,
- (a) a record of equipment examinations, tests and repairs performed during the day under clause 12 (3) (f);
 - (b) a record of hoisting device maintenance and examinations performed during the day under subsection 20 (5);
 - (c) REVOKED: O. Reg. 32/14, s. 52.
 - (d) any arrangements for medical advice or support made under section 34 in respect of the day;
 - (e) a description of any diving vessel used during the day;
 - (f) a record of any disposal of equipment undertaken during the day under clause 60 (1) (f);
 - (g) the name of any client on whose behalf the diving operation is being carried out on the day; and
 - (h) a general description of the purpose of the diving operation on the day. O. Reg. 629/94, s. 64 (3); O. Reg. 32/14, s. 52.
- (4) A daily record shall state the date in respect of which it is made and shall include the name and signature of the diving supervisor. O. Reg. 629/94, s. 64 (4).

(5) A diving supervisor who makes a daily record under this section shall file the record with his or her employer within a reasonable time. O. Reg. 629/94, s. 64 (5).

(6) An employer with whom a daily record is filed shall retain the record for a period of five years from the day in respect of which it is made, together with the attachments described in subsection (7). O. Reg. 629/94, s. 64 (6).

(7) An employer shall attach to the daily record a copy of any report or notice relating to the day that was given under sections 51 to 53.1 of the Act. O. Reg. 428/21, s. 2.

65., 66. REVOKED: O. Reg. 32/14, s. 53.

Ontario Court of Justice
Last Updated: March 1, 2014

SCHEDULE 67.2

Ontario Regulation 629/94 under the *Occupational Health and Safety Act*

ITEM	COLUMN 1	COLUMN 2 SECTION	SET FINE
1.	Failing to ensure the Ministry of Labour is given adequate notice of a diving operation	5	\$295.00
2.	Failing to have required documents available at the dive site	8	\$295.00
3.	Diving supervisor failing to be at the dive site and in direct control of the diving operation	12 (2)	\$295.00
4.	Diving supervisor failing to ensure that an adequate number of standby divers are present and properly positioned	12 (4) (a)	\$295.00
5.	Diving supervisor failing to ensure that no standby diver dives except in an emergency	12 (4) (f)	\$295.00
6.	Diver failing to have log book at dive site	13 (1)(c)	\$195.00
7.	Diver failing to undergo medical examination	13 (1)(d)	\$195.00
8.	Standby diver unlawfully diving where no emergency	13 (9) (a)	\$195.00
9.	Standby diver unlawfully performing other duties	13 (9) (b)	\$195.00
10.	Standby diver being inadequately dressed or equipped	13 (9)(c)	\$195.00
11.	Failing to ensure adequacy of diving equipment and related materials	15	\$295.00

12.	Diving supervisor failing to ensure that an adequate lifeline is attached to each diver	18	\$295.00
13.	Failing to ensure adequate crew for S.C.U.B.A.	37	\$295.00
14.	Failing to ensure adequate crew for surface-supplied diving	39	\$295.00
15.	Failing to ensure water flow hazards are identified and adequately controlled	54 (2)	\$295.00
16.	Failing to ensure mechanisms hazardous to divers comply with applicable CSA Standard	55	\$295.00

ONTARIO REGULATION 414/05**FARMING OPERATIONS**

Consolidation Period: From June 1, 2023 to the e-Laws currency date.

Last amendment: 72/23.

This is the English version of a bilingual regulation.

Application of Act to farming operations

1. Subject to the limitations and conditions set out in this Regulation, the Act applies to farming operations. O. Reg. 414/05, s. 1.

Exception

2. Despite section 1, the Act does not apply to a farming operation operated by a self-employed person without any workers. O. Reg. 414/05, s. 2.

Limitations, joint health and safety committees

3. (1) Despite section 1, subsection 9 (2) of the Act applies only to farming operations where 20 or more workers are regularly employed and have duties that include performing work related to one or more of the operations specified in subsection (2). O. Reg. 414/05, s. 3 (1).

(2) The following are the operations referred to in subsection (1):

1. Mushroom farming.
2. Greenhouse farming.
3. Dairy farming.
4. Hog farming.
5. Cattle farming.
6. Poultry farming. O. Reg. 414/05, s. 3 (2).

(3) Despite section 1, where a joint health and safety committee is required at a farming operation, the requirement for certified members set out in subsection 9 (12) of the Act applies to that farming operation only if 50 or more workers are regularly employed at it. O. Reg. 414/05, s. 3 (3).

Application of certain regulations

4. (1) Despite section 1 and subject to subsection (2), the regulations

made under the Act do not apply to farming operations. O. Reg. 414/05, s. 4 (1).

(2) The following regulations apply to farming operations:

1. Ontario Regulation 420/21 (Notices and Reports Under Sections 51 to 53.1 of the Act — Fatalities, Critical Injuries, Occupational Illnesses and Other Incidents) made under the Act.
2. Ontario Regulation 297/13 (Occupational Health and Safety Awareness and Training) made under the Act.
3. Ontario Regulation 381/15 (Noise) made under the Act.
4. Ontario Regulation 559/22 (Naloxone Kits) made under the Act.

O. Reg. 414/05, s. 4 (2); O. Reg. 90/13, s. 1; O. Reg. 298/13, s. 1; O. Reg. 385/15, s. 1; O. Reg. 429/21, s. 1; O. Reg. 72/23, s.1.

5. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 414/05, s. 5.

ONTARIO REGULATION 714/94

FIREFIGHTERS — PROTECTIVE EQUIPMENT

Consolidation Period: From July 1, 2022 to the e-Laws currency date.

Last amendment: 368/22.

This is the English version of a bilingual regulation.

1. In this Regulation,
“firefighter” means a firefighter as defined in subsection 1 (1) of the *Fire Protection and Prevention Act*, 1997. O. Reg. 24/09, s. 1.
2. This Regulation applies to every firefighter and to every employer of a firefighter. O. Reg. 714/94, s. 2.
3. (1) Anything may vary from a standard prescribed by this Regulation if,
 - (a) the variation maintains or increases the protection for the health or safety of workers; and
 - (b) at least 60 days before the variation, written notice of the variation is given to a Director and the joint health and safety committee and to the trade union, if any. O. Reg. 714/94, s. 3 (1).(2) The notice under clause (1) (b) is not required if an engineer has certified in writing that the variation meets the criteria set out in clause (1) (a). O. Reg. 714/94, s. 3 (2).
4. (1) A firefighter who is exposed to the hazard of head injury shall wear head protective equipment that is appropriate in the circumstances. O. Reg. 80/02, s. 1.
 - (2) The employer shall provide training and instruction to every firefighter in the proper care and use of head protective equipment and in the limitations of protection afforded by it. O. Reg. 714/94, s. 4 (2).
 - (3) Head protective equipment shall be kept in good condition and shall be inspected periodically by the employer. O. Reg. 714/94, s. 4 (3).
5. The employer shall provide every firefighter who may be required to perform interior structural fire suppression duties with structural firefighting protective garments that meet or exceed the requirements of the following standard:

1. NFPA 1971 "Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting", 2007 edition, in the case of garments manufactured on or after March 1, 2007.
2. CAN/CGSB-155.1-M88 "Firefighters' Protective Clothing for Protection Against Heat and Flame", in the case of garments manufactured before March 1, 2007. O. Reg. 480/10, s. 1.

6. (1) In this section,

"chassis mounted aerial device" means any device, whether extensible, articulating or both, that is mounted on a vehicle's chassis and designed to position persons, handle materials or discharge water, but does not include portable ladders. O. Reg. 714/94, s. 6 (1).

(2) Subject to subsection (3), a chassis mounted aerial device shall be visually inspected by a competent person at the times recommended by the manufacturer but in any event at least once every calendar year. O. Reg. 714/94, s. 6 (2).

(3) Every chassis mounted aerial device shall be visually inspected by a competent person,

- (a) before being used for the first time;
- (b) after every major repair;
- (c) after being used if it may have been subjected to unusual operating conditions of stress or load; and
- (d) when there is reason to believe that the maximum loads or stresses recommended in the manufacturer's operating specifications have been exceeded. O. Reg. 714/94, s. 6 (3).

(4) Every chassis mounted aerial device shall be tested using a method of inspection that does not physically alter or damage material,

- (a) when a visual inspection indicates a potential hazard; and
- (b) not later than December 15, 1999 for the first such testing and subsequently not later than five years from the date of the last non-destructive testing. O. Reg. 714/94, s. 6 (4).

(5) The visual inspection and non-destructive tests under this section shall be performed in accordance with NFPA 1914, Standard for Testing Fire Department Aerial Devices, 1991 Edition, excluding section 1-7. O. Reg. 714/94, s. 6 (5).

(6) If a visual inspection or any test reveals a hazard to the integrity of the chassis mounted aerial device, the employer shall ensure that,

- (a) the chassis mounted aerial device is taken out of service;
- (b) the repairs, if any, are undertaken by a competent person; and
- (c) if the repairs involve welding, the welds are inspected and approved by an inspector who is a Level III Welding Inspector under CSA Standard W178.2-1990 Certification of Welding Inspectors, and who is employed by an organization certified under CSA Standard W178.1-1990 Certification of Welding Inspection Organizations. O. Reg. 714/94, s. 6 (6).

(7) Service records for a chassis mounted aerial device shall be maintained for as long as the device is in service and shall include a record of,

- (a) visual inspections;
- (b) non-destructive and other tests;
- (c) the problems identified;
- (d) the repairs made; and
- (e) the name and signature of the competent persons who undertook the activities mentioned in clauses (a) to (d). O. Reg. 714/94, s. 6 (7).

7. (1) This section applies to:

- 1. A fire truck first put into service, by the employer or anyone else, on or after December 15, 1995.
- 2. A fire truck acquired by the employer on or after December 31, 1997. O. Reg. 449/97, s. 1.

(2) The cab of the fire truck shall be enclosed and shall have,

- (a) one or more driving and crew compartments;
- (b) a roof, floor, four sides and positive latching doors which together provide total enclosure of the driver and passengers; and
- (c) sufficient seats for the maximum number of persons intended under the manufacturer's specifications to be accommodated in the cab. O. Reg. 449/97, s. 1.

(3) The fire truck shall be equipped with sufficient anti-slip handholds to allow firefighters to use the position known as the three-point contact method when entering or exiting the cab. O. Reg. 449/97, s. 1.

(4) Tools, self-contained breathing apparatus and other fire fighting equipment or paraphernalia carried in the cab of the fire truck shall be

secured to fixed positions by positive mechanical means or stowed in compartments with positive latching doors. O. Reg. 449/97, s. 1.

7.1 The cab of a fire truck described in paragraph 1 of subsection 7 (1) shall have seats equipped with back and anti-whiplash head supports and seat belts. O. Reg. 449/97, s. 1.

8. (1) No firefighter shall travel on board a fire truck that is moving at more than 8 kilometres an hour unless he or she is seated within a cab. O. Reg. 449/97, s. 1; O. Reg. 63/18, s. 1 (1).

(2) REVOKED: O. Reg. 63/18, s. 1 (2).

9. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 714/94, s. 9.

R.R.O. 1990, REGULATION 857**TEACHERS**

Consolidation Period: From June 28, 1991 to the e-Laws currency date.

Last amendment: 352/91.

This is the English version of a bilingual regulation.

1. The purpose of this Regulation is to make the Act apply to teachers in a manner that is consistent with the *Education Act*. R.R.O. 1990, Reg. 857, s. 1.

2. Subject to section 3, the Act applies to all persons who are employed as teachers as defined in the *Education Act*. R.R.O. 1990, Reg. 857, s. 2.

3. The following conditions and limitations apply to the application of the Act to teachers:

1. A principal, vice-principal or teacher appointed by an employer of teachers to direct and supervise a school or an organizational unit of a school is a person who has charge of a school or authority over a teacher and exercises managerial functions.
2. An employer of teachers that establishes and maintains one joint health and safety committee for all its teachers shall be deemed to have complied with subsection 9 (2) of the Act with respect to all its teachers but nothing in this paragraph requires the discontinuance of any joint health and safety committee or committee of a like nature in existence on the 1st day of October, 1979 or prevents the employer from establishing more than one joint health and safety committee for its teachers.
3. Part V of the Act does not apply to a teacher where the circumstances are such that the life, health or safety of a pupil is in imminent jeopardy. R.R.O. 1990, Reg. 857, s. 3.

ONTARIO REGULATION 297/13

OCCUPATIONAL HEALTH AND SAFETY AWARENESS AND TRAINING

Consolidation Period: From January 1, 2021 to the e-Laws currency date.

Last amendment: 751/20

This is the English version of a bilingual regulation.

BASIC OCCUPATIONAL HEALTH AND SAFETY AWARENESS TRAINING

Basic occupational health and safety awareness training — workers

1. (1) An employer shall ensure that a worker who performs work for the employer completes a basic occupational health and safety awareness training program that meets the requirements set out in subsection (3) as soon as practicable. O. Reg. 297/13, s. 1 (1).

(2) Subsection (1) does not apply if,

(a) the worker previously completed a basic occupational health and safety awareness training program and provides the employer with proof of completion of the training; and

(b) the employer verifies that the previous training meets the requirements set out in subsection (3). O. Reg. 297/13, s. 1 (2).

(3) A basic occupational health and safety awareness training program for workers must include instruction on the following:

1. The duties and rights of workers under the Act.
2. The duties of employers and supervisors under the Act.
3. The roles of health and safety representatives and joint health and safety committees under the Act.
4. The roles of the Ministry, the Workplace Safety and Insurance Board and entities designated under section 22.5 of the Act with respect to occupational health and safety.
5. Common workplace hazards.
6. The requirements set out in Regulation 860 (Workplace Hazardous Materials Information System (WHMIS)) with respect to information and instruction on hazardous products.
7. Occupational illness, including latency. O. Reg. 297/13, s. 1 (3); O. Reg. 191/19, s. 1.

Basic occupational health and safety awareness training — supervisors

2. (1) An employer shall ensure that a supervisor who performs work for the employer completes a basic occupational health and safety awareness training program that meets the requirements set out in subsection (3) within one week of performing work as a supervisor. O. Reg. 297/13, s. 2 (1).

(2) Subsection (1) does not apply if,

- (a) the supervisor previously completed a basic occupational health and safety awareness training program and provides the employer with proof of completion of the training; and
- (b) the employer verifies that the previous training meets the requirements set out in subsection (3). O. Reg. 297/13, s. 2 (2).

(3) A basic occupational health and safety awareness training program for supervisors must include instruction on the following:

- 1. The duties and rights of workers under the Act.
- 2. The duties of employers and supervisors under the Act.
- 3. The roles of health and safety representatives and joint health and safety committees under the Act.
- 4. The roles of the Ministry, the Workplace Safety and Insurance Board and entities designated under section 22.5 of the Act with respect to occupational health and safety.
- 5. How to recognize, assess and control workplace hazards, and evaluate those controls.
- 6. Sources of information on occupational health and safety. O. Reg. 297/13, s. 2 (3).

Exemptions

3. (1) The requirements set out in section 1 do not apply to an employer with respect to a supervisor if,

- (a) before this Regulation came into force, the supervisor was performing work as a supervisor for the employer; and
- (b) the employer verifies that, before this Regulation came into force, the supervisor completed a basic occupational health and safety awareness training program that meets the requirements set out in subsection 2 (3). O. Reg. 297/13, s. 3 (1).

(2) The requirements set out in section 1 do not apply to an employer

with respect to a worker or supervisor if,

- (a) another employer was exempt with respect to the worker or supervisor under subsection (1); and
- (b) the worker or supervisor provides the employer with proof of the exemption. O. Reg. 297/13, s. 3 (2).

Record of training

4. (1) An employer shall maintain a record of the basic occupational health and safety awareness training required by sections 1 and 2 that is completed by workers and supervisors who perform work for the employer. O. Reg. 297/13, s. 4 (1).

(2) An employer shall maintain a record of workers and supervisors who perform work for the employer in respect of whom the employer is exempt under section 3. O. Reg. 297/13, s. 4 (2).

(3) If a worker or supervisor completes a training program under subsection 1 (1) or 2 (1), the employer shall, at the request of the worker or supervisor, provide the worker or supervisor with written proof of completion of the training. O. Reg. 297/13, s. 4 (3).

(4) If an employer is exempt with respect to a supervisor under subsection 3 (1), the employer shall, at the request of the supervisor, provide the supervisor with written proof of the exemption. O. Reg. 297/13, s. 4 (4).

(5) If, within six months of a worker or supervisor no longer performing work for an employer, the worker or supervisor requests a written proof described in subsection (3) or (4), the employer shall provide the worker or supervisor with the requested written proof. O. Reg. 297/13, s. 4 (5).

CERTIFICATION TRAINING

Certification training

5. (1) An employer shall carry out the training programs necessary to enable a committee member to become a certified member, and the programs must be selected in accordance with the training and other requirements established by the Chief Prevention Officer under section 7.6 of the Act. O. Reg. 297/13, s. 5 (1); O. Reg. 191/19, s. 2.

(2) For greater certainty, in subsection (1),

"carry out" includes paying for the training. O. Reg. 297/13, s. 5 (2).

Working at Heights Training — Construction Projects**APPLICATION**

6. The requirements of section 7 apply to an employer in respect of workers who are required under Ontario Regulation 213/91 (Construction Projects) to use any of the following methods of fall protection:

1. A travel restraint system.
2. A fall restricting system.
3. A fall arrest system.
4. A safety net.
5. A work belt.
6. A safety belt. O. Reg. 253/14, s. 1.

Required training programs

7. (1) An employer shall ensure that a worker who may use a method of fall protection listed in section 6 has successfully completed,

- (a) a working at heights training program that meets the requirements set out in subsection (2) for which the validity period has not expired as described in section 8; or
- (b) a training program on fall protection prescribed under section 139 of the Occupational Health and Safety Regulations, 2012 made under the Occupational Health and Safety Act (Newfoundland and Labrador) for which the validity period has not expired as described in section 8. O. Reg. 751/20, s. 1.

(2) The following requirements apply to a working at heights training program described in clause (1) (a):

1. It must be approved by the Chief Prevention Officer under subsection 7.1 (2) of the Act as meeting the working at heights training program standard that applied at the time of the training.
2. It must be provided by a training provider approved by the Chief Prevention Officer under subsection 7.2 (2) of the Act as meeting the working at heights training provider standard that applied at the time of the training. O. Reg. 751/20, s. 1.

(3) Subsection (1) does not apply if the worker,

- (a) is performing work on a project at a workplace where,
 - (i) automobiles are manufactured or assembled,

- (ii) automobile marshalling is conducted,
- (iii) automobile parts manufacturing is conducted,
- (iv) automobile parts warehousing occurs, or
- (v) automobile research and development is conducted; and

(b) is directly employed by an employer that manufactures or assembles automobiles and that owns and operates the workplace described in clause (a). O. Reg. 751/20, s. 1.

(4) In subsection (3),

“automobile” includes a van or truck with a gross vehicle weight rating of 14,000 pounds (6,350 kilograms) or less; (“automobile”)

“automobile marshalling” means receiving assembled automobiles from the location where they are manufactured or assembled, storing the automobiles before delivery to purchasers or persons who sell to purchasers, organizing them for delivery and arranging for delivery; (“triage d’automobiles”)

“automobile parts manufacturing” means,

- (a) producing automobile parts that are supplied directly to an automobile manufacturing or assembling factory or an automobile parts warehouse, and
- (b) producing elements of automobile parts where those elements are supplied directly to an automobile manufacturing or assembling factory; (“fabrication de pièces automobiles”)

“automobile parts warehousing” means receiving automobile parts or accessories, storing them, organizing them for delivery and delivering them or arranging for delivery; (“entreposage de pièces automobiles”)

“automobile research and development” means research, development, design, engineering or testing related to automobile or automobile parts manufacturing or assembly. (“recherche et développement automobile”) O. Reg. 751/20, s. 1.

Training — period of validity

8. (1) The working at heights training described in clause 7 (1) (a) is valid for three years from the date of successful completion of the training program. O. Reg. 751/20, s. 1.

(2) Despite subsection (1), any working at heights training described in clause 7 (1) (a) that was successfully completed between February 28, 2017 and August 31, 2017 is valid for four years from the date of successful

completion of the training program. O. Reg. 751/20, s. 1.

(3) The training program on fall protection described in clause 7 (1) (b) is valid until the date indicated on the proof of successful completion issued to the worker by the Workplace Health, Safety and Compensation Commission under the Occupational Health and Safety Regulations, 2012 made under the Occupational Health and Safety Act (Newfoundland and Labrador). O. Reg. 751/20, s. 1.

Training requirements under O. Reg. 213/91

9. For greater certainty, the requirements of subsection 26.2 (1) of Ontario Regulation 213/91 (Construction Projects) apply in addition to the training requirements of section 7. O. Reg. 253/14, s. 1.

Record of training

10. (1) An employer shall maintain a record of the training that is required by section 7. O. Reg. 253/14, s. 1.

(2) The training record for working at heights training described in clause 7 (1) (a) shall include the following information:

1. The name of the worker.
2. The name of the approved training provider.
3. The date on which the approved training was successfully completed.
4. The name of the approved training program that was successfully completed. O. Reg. 253/14, s. 1.

(3) A copy of a worker's proof of successful completion of a working at heights training program described in clause 7 (1) (a), issued by the Chief Prevention Officer, is a training record for the purposes of subsection (1). O. Reg. 751/20, s. 3 (3).

(3.1) A copy of a worker's proof of successful completion of a training program on fall protection described in clause 7 (1) (b) that is issued by the Workplace Health, Safety and Compensation Commission under the Occupational Health and Safety Regulations, 2012 made under the Occupational Health and Safety Act (Newfoundland and Labrador) is a training record for the purposes of subsection (1). O. Reg. 751/20, s. 3 (3).

(4) The employer shall make a training record available to an inspector on request. O. Reg. 253/14, s. 1.

Transition

11. Revoked: O. Reg. 751/20, s. 4.

Ontario Court of Justice
Last Updated: April 1, 2018

SCHEDULE 67.5

Ontario Regulation 297/13 under the *Occupational Health and Safety Act*

Item	Offence	Section	Set Fine
1.	Employer failing to ensure that worker completes basic occupational health and safety awareness training program	1 (1)	\$550
2.	Employer failing to ensure that supervisor completes basic occupational health and safety awareness training program	2 (1)	\$550
3.	Employer failing to maintain record of completed basic occupational health and safety awareness training	4 (1)	\$550
4.	Employer failing to maintain record of basic occupational health and safety awareness training exemption	4 (2)	\$550
5.	Employer failing to carry out training programs necessary for committee member to be certified member	5 (1)	\$550
6.	Employer failing to ensure that worker has valid working at heights training	7 (1)	\$550
7.	Employer failing to maintain record of working at heights training	10 (1)	\$550

R.R.O. 1990, REGULATION 855

OIL AND GAS — OFFSHORE

Consolidation Period: From July 1, 2022 to the e-Laws currency date.

Last amendment: 372/22.

This is the English version of a bilingual regulation.

DEFINITIONS

1. In this Regulation,

"adequate", when used in relation to a procedure, plan, material, device, object or thing, means that it is,

(a) sufficient for both its intended and its actual use, and

(b) sufficient to protect a worker from occupational illness or occupational injury; ("adéquat")

"adequately" has a meaning that corresponds to the meaning of "adequate"; ("adéquatement")

"boom" means the projecting part of a backhoe, shovel, crane or similar lifting device from which a load is likely to be supported; ("flèche")

"cathead" means a spool-shaped attachment on a winch around which rope for hoisting and pulling is wound; ("cabestan")

"drawworks" means the hoisting mechanism on a rig which raises or lowers the drill stem and bit; ("treuil de forage")

"flammable liquid" means a liquid having a flash point below 37.8° Celsius, and a vapour pressure below 275 kilopascals absolute at 37.8° Celsius; ("liquide inflammable")

"kelly" means the heavy steel pipe with four or six sides that is connected to the top of the drill pipe; ("tige d'entraînement")

"lifting device" means a device that is used to raise or lower any material or object and includes its rails and other supports; ("appareil de levage")

"prime mover" means an initial source of motive power; ("élément moteur")

"rig" means any rotary drilling ship, cable tool ship, barge, platform or other rig used for offshore oil or gas exploration, development, production, maintenance, workover, capping, plugging or abandonment

operations; ("installation de forage")

"transmission equipment" means any object or objects by which the motion of a prime mover is transmitted to a machine that is capable of utilizing such motion and includes a shaft, pulley, belt, chain, gear, clutch or other device. ("organe de transmission") R.R.O. 1990, Reg. 855, s. 1; O. Reg. 566/06, s. 1; O. Reg. 421/10, s. 1.

PART I GENERAL

2. In applying this Regulation, the composition, design, size and arrangement of any material, object, device or thing may vary from the composition, design, size or arrangement prescribed if the factors of strength, health and safety are equal to or greater than the factors of strength, health and safety in the composition, design, size or arrangement prescribed. R.R.O. 1990, Reg. 855, s. 2.

3. This Regulation applies to all work done offshore on or from a rig. R.R.O. 1990, Reg. 855, s. 3.

4. The minimum age of a worker is eighteen years of age. R.R.O. 1990, Reg. 855, s. 4.

5. Prior to the start of the drilling season, the owner of the licence of occupation under the *Mining Act* shall provide a notice in writing to the Director, setting out,

- (a) the contents of the operating manual required under section 14; and
- (b) details of an emergency plan to rescue workers in the event of an emergency. R.R.O. 1990, Reg. 855, s. 5.

6. An emergency plan shall be prepared in writing and shall include,

- (a) a suitable and rapid means of obtaining first aid help and transportation from the rig to a hospital for injured workers; and
- (b) the measures and procedures to be used to,
 - (i) control a major fire,
 - (ii) react to serious damage to the rig,
 - (iii) evacuate the rig, and
 - (iv) notify rescue personnel. R.R.O. 1990, Reg. 855, s. 6.

7., -10. Revoked: O. Reg. 423/21, s. 1.

11. A record of the qualifications of all workers appointed as competent persons shall be kept in the permanent records of the employer for as long as the worker is employed with the employer. R.R.O. 1990, Reg. 855, s. 11.

PART II PREPARATION

12. Muster lists shall be posted in two conspicuous locations on the rig and in each cabin. R.R.O. 1990, Reg. 855, s. 12.

13. A muster list shall indicate,

- (a) emergency signals or alarms;
- (b) fire stations;
- (c) survival craft stations;
- (d) workers in charge of survival craft; and
- (e) procedures outlined in the emergency plan. R.R.O. 1990, Reg. 855, s. 13.

14. An operating manual prescribing the procedures to be followed shall be,

- (a) available for each drilling or related operation; and
- (b) readily accessible to a worker on the drilling site. R.R.O. 1990, Reg. 855, s. 14.

15. The employer shall ensure that a rig and its equipment is inspected for compliance with this Regulation,

- (a) in port, by an inspector prior to the drilling season; and
- (b) by a worker who is a competent person at least once every thirty working days while in operation. R.R.O. 1990, Reg. 855, s. 15.

16. The employer shall ensure that the derrick or mast is inspected by a competent person,

- (a) before being put into position, raised or lowered; and
- (b) at least once every year while in port. R.R.O. 1990, Reg. 855, s. 16.

17. The employer shall ensure that firefighting and life saving equipment is inspected by a competent person at least once every two weeks. R.R.O. 1990, Reg. 855, s. 17.

18. The employer shall ensure that a lifting device is examined by a competent person to determine its capability of handling the maximum

load as rated,

- (a) before being used for the first time; and
- (b) thereafter as often as necessary but not less frequently than recommended by the manufacturer and, in any case, at least once a year. R.R.O. 1990, Reg. 855, s. 18.

19. Written reports of inspections required by this Regulation shall be made by a competent person and shall be kept,

- (a) on the rig for a period of one year from the date of inspection; and
- (b) at the employer's principal office in Ontario for a period of five years from the date of inspection. R.R.O. 1990, Reg. 855, s. 19.

20. The employer shall ensure that for each crew of workers on a working rig,

- (a) a fire drill is held at least once every two weeks;
- (b) an evacuation drill is held at least once every four weeks; and
- (c) a man-over-board drill is held at least once every four weeks. R.R.O. 1990, Reg. 855, s. 20.

PART III GENERAL REQUIREMENTS

21. A worker required to wear or use any protective clothing, equipment or device shall be instructed and trained in its care and use before wearing or using the protective clothing, equipment or device. R.R.O. 1990, Reg. 855, s. 21.

22. Every worker who is exposed to the hazard of head injury shall wear head protection appropriate in the circumstances. R.R.O. 1990, Reg. 855, s. 22.

23. Every worker who is exposed to the hazard of eye injury shall wear eye protection appropriate in the circumstances. R.R.O. 1990, Reg. 855, s. 23.

24. Every worker who is exposed to the hazard of foot injury shall wear foot protection appropriate in the circumstances. R.R.O. 1990, Reg. 855, s. 24.

25. Long hair shall be suitably confined to prevent entanglement with any rotating shaft, spindle, gear, belt or other source of entanglement. R.R.O. 1990, Reg. 855, s. 25.

26. Every worker who is exposed to the hazard of skin injury by contact

with,

- (a) a noxious gas, liquid, fume or dust;
- (b) a sharp or jagged object which may puncture, cut or abrade the worker's skin;
- (c) a hot object, hot liquid or molten metal; or
- (d) radiant heat,

shall be provided with protection by the employer in the form of,

- (e) wearing apparel sufficient to protect the worker from injury; or
- (f) a shield, screen or similar barrier,

appropriate in the circumstances. R.R.O. 1990, Reg. 855, s. 26.

27. Where a worker is exposed to the hazard of falling and the surface to which the worker might fall is more than three metres below the position where the worker is situated,

- (a) the employer shall provide and the worker shall wear a fall arrest system consisting of a serviceable safety belt or harness and lifeline that is adequately secured to a fixed support and so arranged that the worker cannot fall freely for a vertical distance of more than 1.5 metres; and
 - (b) the fall arrest system described in clause (a) shall,
 - (i) have sufficient capacity to absorb twice the energy and twice the load that under the circumstances of its use may be transmitted to it, and
 - (ii) be equipped with a shock absorber or other devices to limit the maximum arresting force to 8.0 kilonewtons to the worker.
- R.R.O. 1990, Reg. 855, s. 27; O. Reg. 421/10, s. 5.

28. Every worker who is exposed to the hazard of falling into water shall wear a life jacket or other personal flotation device that is appropriate in the circumstances to protect the worker from drowning. O. Reg. 188/19, s. 1.

29. Material, articles or things,

- (a) required to be lifted, carried or moved shall be lifted, carried or moved in such a way and with such precautions and safeguards, including protective clothing, guards or other precautions as will ensure that the lifting, carrying or moving of the material, articles or things does not endanger the safety of any worker;

- (b) shall be transported, placed or stored so that the material, articles or things,
 - (i) will not tip, collapse or fall, and
 - (ii) can be removed or withdrawn without endangering the safety of any worker; and
- (c) to be removed from a storage area, pile or rack shall be removed in a manner that will not endanger the safety of any worker. R.R.O. 1990, Reg. 855, s. 29.

30. Machinery, equipment or material that may tip or fall and endanger any worker shall be secured against tipping or falling. R.R.O. 1990, Reg. 855, s. 30.

31. Cylindrical objects stored on their side shall be piled symmetrically with each unit in the bottom row chocked or wedged to prevent motion. R.R.O. 1990, Reg. 855, s. 31.

32. Barrels, drums or kegs that are piled on their ends shall have two parallel planks placed on top of each row before another row is added. R.R.O. 1990, Reg. 855, s. 32.

33. A storage cylinder for compressed gas shall,

- (a) be secured in position during use;
- (b) have the valve protection cap in position when the cylinder is not in use;
- (c) when containing acetylene, be in an upright position; and
- (d) be protected from physical damage. R.R.O. 1990, Reg. 855, s. 33.

34. A silo, bin, hopper, structure, container or thing used for storing or containing bulk material may be entered only where,

- (a) the supply of material thereto is stopped and precautions are taken that will prevent any further supply;
- (b) mechanical equipment that may endanger a worker is,
 - (i) disconnected from its power source, and
 - (ii) locked out;
- (c) the space is ventilated to provide a safe atmosphere;
- (d) the space is tested for lack of oxygen and presence of combustible gases;
- (e) the worker entering is wearing a safety harness or other similar

equipment attached to a rope or lifeline; and

- (f) at least one other worker equipped with a suitable alarm and capable of rendering any necessary assistance is keeping watch nearby. R.R.O. 1990, Reg. 855, s. 34.

35. Where the operator of a crane or similar material handling equipment does not have a full view of the intended path of travel of the crane or similar material handling equipment or its load, the crane or similar material handling equipment shall only be operated as directed by a signaler who is a competent person and who is stationed,

- (a) in full view of the operator;
- (b) with a full view of the intended path of travel of the crane or similar material handling equipment and its load; and
- (c) clear of the intended path of travel of the crane or similar material handling equipment and its load. R.R.O. 1990, Reg. 855, s. 35.

36. Except for the purpose of a test of the material handling equipment, no material handling equipment shall be loaded in excess of its maximum rated load. R.R.O. 1990, Reg. 855, s. 36.

37. A worker who may be exposed to a biological, chemical or physical agent that may endanger the worker's safety or health shall be trained,

- (a) in the precautions and procedures to be followed in the handling, use and storage of the agent;
- (b) in the proper use and care of required personal protective equipment; and
- (c) in the proper use of emergency measures and procedures. R.R.O. 1990, Reg. 855, s. 37.

38. No food, drink or tobacco shall be taken into, left or consumed in any room, area or place where any substance that is poisonous by ingestion is exposed. R.R.O. 1990, Reg. 855, s. 38.

39. Containers used for handling or storage of corrosive, flammable or hazardous materials shall be,

- (a) appropriate for their intended use;
- (b) constructed to prevent spillage or leakage;
- (c) labelled to identify the contents; and
- (d) disposed of in a manner that will not endanger a worker's health or safety and complies with the requirements of the Ministry of the

Environment. R.R.O. 1990, Reg. 855, s. 39.

40. A rig shall have an easily accessible eyewash station and deluge shower adjacent to the mud mixing facilities. R.R.O. 1990, Reg. 855, s. 40.

41. REVOKED: O. REG. 384/15, s. 1.

42. Where a machine or prime mover or transmission equipment other than a cathead, kelly or rotary table, has an exposed moving part that may endanger the safety of any worker, the machine or prime mover or transmission equipment shall be equipped with and guarded by a guard or other device that prevents access to the moving part. R.R.O. 1990, Reg. 855, s. 42.

43. An in-running nip hazard or any part of a machine, device or thing that may endanger the safety of any worker shall be equipped with and guarded by a guard or other device that prevents access to the pinch point. R.R.O. 1990, Reg. 855, s. 43.

44. An emergency stop control on a power-driven machine shall,

- (a) be conspicuously identified; and
- (b) be located within easy reach of the operator. R.R.O. 1990, Reg. 855, s. 44.

45. An operating control that acts as a guard for a machine not otherwise guarded shall,

- (a) be in a location where the safety of the operator is not endangered by moving machinery;
- (b) be arranged so that it cannot be operated accidentally; and
- (c) not be made ineffective by a tie-down device or other means. R.R.O. 1990, Reg. 855, s. 45.

46. A grinding wheel shall be,

- (a) marked with the maximum speed at which it may be used;
- (b) checked for defects before mounting;
- (c) mounted in accordance with the manufacturer's specifications;
- (d) operated at a speed which does not exceed the manufacturer's recommendations;
- (e) provided with protective hoods that enclose the wheel as closely as the work will permit;
- (f) operated only by workers protected by eye protection; and

- (g) stored where it will not be subjected to,
 - (i) extreme heat or cold, or
 - (ii) damage from impact. R.R.O. 1990, Reg. 855, s. 46.

47. A work rest for a grinding wheel shall,

- (a) have a maximum clearance of three millimetres from the grinding wheel;
- (b) be in a position above the centre line of the grinding wheel; and
- (c) not be adjusted while the grinding wheel is in motion. R.R.O. 1990, Reg. 855, s. 47.

48. (1) A lifting device including a crane, pedestal or other mount shall,

- (a) be capable of supporting the loads likely to be applied to it;
- (b) have the maximum load rating clearly marked near the operating station;
- (c) when the hoisting equipment is a crane, have,
 - (i) a load capacity chart that specifies boom angle and maximum working loads for each block, posted inside the control cab where load rating is more than five tons, and
 - (ii) boom and block travel-limiting devices;
- (d) have hooks equipped with safety catches;
- (e) be equipped with suitable ropes, chains, slings and other fittings so as to adequately protect all workers;
- (f) have all operating controls clearly identified;
- (g) be plainly marked with sufficient information so as to enable the operator of the device to determine the maximum rated load that the device is capable of lifting under any operating condition;
- (h) have a cab, screen, canopy guard or other adequate protection for the operator where he or she may be exposed to the hazard of falling material;
- (i) when it is a pneumatic or hydraulic hoist, have controls that automatically return to their neutral position when released;
- (j) be operated only by,
 - (i) a competent person, or

- (ii) a worker being instructed who is accompanied by a competent person; and
- (k) be operated in such a way that,
 - (i) no part of the load passes over any worker,
 - (ii) where a worker may be endangered by the rotation or uncontrolled motion of a load, one or more guide ropes is used to prevent rotation or other uncontrolled motion, and
 - (iii) when its load is in a raised position, the controls are attended by an operator. R.R.O. 1990, Reg. 855, s. 48 (1); O. Reg. 421/10, s. 7.

(2) Subclause (1) (k) (iii) does not apply to a hydraulic hoist that supports the load from below and is fixed in one location. R.R.O. 1990, Reg. 855, s. 48 (2).

49. Hoisting controls operated from other than a cab or cage shall,

- (a) be located so that they can be operated at a safe distance from a load being lifted; and
- (b) automatically return to their neutral position when released. R.R.O. 1990, Reg. 855, s. 49.

50. Where a lifting device is equipped with one or more limit switches,

- (a) each limit switch shall automatically cut off the power and apply the brake when the limit is reached; and
- (b) no limit switch shall be used as an operating control unless,
 - (i) the limit switch is designed for such use, and
 - (ii) the lifting device has a second limit switch in addition to the control limit switch. O. Reg. 421/10, s. 8.

51. A crane, lift truck or similar equipment shall be used to support, raise or lower a worker only when,

- (a) the worker is on a platform,
 - (i) equipped with adequate safety devices that will automatically prevent the platform and load from falling if the platform's normal support fails,
 - (ii) suspended from a boom, and the person is attached to a separate lifeline suspended from the boom or a fixed support capable of supporting at least four times the weight of the worker, or

(iii) attached to a mast or boom that,

(A) is hydraulically or pneumatically operated, and

(B) is equipped with a safety device that will prevent free fall of the platform in the event of a pressure line failure;

(b) where the equipment is not designed for the specific purpose of hoisting personnel, the load applied to the crane, lift truck or similar equipment is less than one half the maximum rated load;

(c) the platform has a sign indicating the load that may be applied to the crane, lift truck or similar equipment under clause (b);

(d) where controls are provided at more than one location,

(i) each control station is provided with means whereby the operator can shut off power to the equipment, and

(ii) interlocks have been provided so that only one station can be operative at any time; and

(e) except when the controls are operated from the platform, the controls are attended and operated by another worker. R.R.O. 1990, Reg. 855, s. 51; O. Reg. 421/10, s. 9.

52. (1) There shall be a guardrail,

(a) at the perimeter of any area where there is a drop of more than one metre;

(b) on a mud tank; and

(c) where there is a hazard of falling into water or other hazardous material. R.R.O. 1990, Reg. 855, s. 52 (1).

(2) A guardrail shall consist of,

(a) a top rail not less than 107 centimetres above the surface, floor or platform;

(b) a mid rail located approximately mid way between the top rail and walking surface; and

(c) posts or uprights, supporting the top rail and spaced not more than three metres apart from centre to centre. R.R.O. 1990, Reg. 855, s. 52 (2).

(3) A guardrail shall,

(a) be capable of withstanding any load likely to be applied to it; and

(b) where tools or other objects may fall on any worker, have a toe-

board extending from the surface, floor or platform to a height of not less than 125 millimetres. R.R.O. 1990, Reg. 855, s. 52 (3); O. Reg. 421/10, s. 10.

- 53.** A cover on an opening in a floor, roof or other surface shall be,
- (a) secured in place; and
 - (b) of sufficient strength to support the greater of,
 - (i) any load likely to be applied to it, or
 - (ii) 2.4 kilonewtons per square metre. R.R.O. 1990, Reg. 855, s. 53.

PART IV RIGS

54. Where natural lighting is inadequate to ensure the safety of any worker, artificial lighting shall be provided and shadows and glare shall be reduced to a minimum. R.R.O. 1990, Reg. 855, s. 54.

55. A rig shall have emergency storage batteries or other system capable of supplying power for twenty-four continuous hours, sufficient to operate,

- (a) the marine radio required under the Ship Station (Radio) Regulations, 1999 under the *Canada Shipping Act, 2001* for transmitting or receiving on the distress frequency;
- (b) the navigation and obstruction lights; and
- (c) the lighting required in communications and navigational control areas of the drill unit. R.R.O. 1990, Reg. 855, s. 55; O. Reg. 421/10, s. 11.

56. A rig shall have emergency lighting that,

- (a) turns on automatically when the regular lighting fails;
- (b) is independent of the regular lighting source;
- (c) provides adequate lighting for evacuation of the area; and
- (d) is tested at least once every three months, but not less frequently than recommended by the manufacturer to ensure the system will function in an emergency,

in every workplace that is,

- (e) a communication centre;
- (f) a drill floor;

- (g) a well control area;
- (h) a stairway;
- (i) an exit;
- (j) a machinery generator area;
- (k) an area where lighting is required for well control;
- (l) a passageway;
- (m) a navigation control area; or
- (n) a survival craft embarkation station. R.R.O. 1990, Reg. 855, s. 56.

57. The rig shall be kept clean, tidy and free from accumulation of waste materials, oil and mud in all areas used by a worker. R.R.O. 1990, Reg. 855, s. 57.

58. Walkways and the area around the base of a derrick ladder shall be clear of obstruction. R.R.O. 1990, Reg. 855, s. 58.

59. Each enclosed workplace at or near which a worker regularly works on a rig shall have at least two exits. R.R.O. 1990, Reg. 855, s. 59.

60. An exit shall,

- (a) be located as distant from the next required exit as practicable;
- (b) be suitably identified with a sign; and
- (c) when the opening is covered by a door, have the door hinged to open in the direction of exit travel. R.R.O. 1990, Reg. 855, s. 60.

61. A diesel or gas powered engine shall,

- (a) be located in an area where combustible gases are not likely to be present;
- (b) be located as far as practicable from the centre line of the well bore;
- (c) be equipped with an emergency stop control;
- (d) be equipped with a fire extinguishing system when in an enclosed area; and
- (e) be equipped with one fire extinguisher having a U. L. C. rating of twenty BC or higher in an open area. R.R.O. 1990, Reg. 855, s. 61.

62. No person shall smoke during emergencies or in any area except those,

- (a) used for recreation;
- (b) used for accommodation purposes; or
- (c) designated by the employer as a smoking area. R.R.O. 1990, Reg. 855, s. 62.

63. Where welding or flame-cutting is planned, the worker shall, prior to starting work,

- (a) inspect the working area for fire hazards;
- (b) test for the presence of combustible gases;
- (c) notify other workers that may be affected by this work; and
- (d) ensure that fire fighting equipment is readily available. R.R.O. 1990, Reg. 855, s. 63.

64. (1) No person under the influence of, or carrying, an intoxicating alcoholic beverage shall enter, or be on, or knowingly be permitted to enter, or be on, a rig.

(2) Subject to subsection (3), no person under the influence of, or carrying, a drug or narcotic substance shall enter, or be on, or knowingly be permitted to enter, or be on, a rig.

(3) A person required to use a drug for a medical purpose and able to perform work may enter and be on a rig upon establishing medical proof thereof. R.R.O. 1990, Reg. 855, s. 64.

65. A rig shall have,

- (a) emergency equipment and life-saving devices sufficient in number to provide for the escape of all workers;
- (b) a light-weight manoeuvrable rescue boat;
- (c) a suitable means of launching all survival or life-saving craft;
- (d) at least four life buoys, of which at least two shall have self-igniting lights;
- (e) life-jackets sufficient in number to provide one for each worker, and in addition, a sufficient number of life-jackets at each survival craft embarkation station to provide one each for 25 per cent of the workers for whom accommodation is available on the survival craft;
- (f) personal flotation devices suitable for performing work which are sufficient in number to provide one each for every worker on shift at any one time;

- (g) a line throwing apparatus and twelve distress signals;
- (h) at least one buoyant personnel transfer basket, except where the drilling unit is not equipped with a crane or where there are fewer than three workers;
- (i) first aid appliances and services as prescribed by Regulation 1101 of the Revised Regulations of Ontario, 1990 (First Aid Requirements) under the *Workplace Safety and Insurance Act, 1997*; and
- (j) at least two workers per shift who possess a standard first aid certificate from St. John Ambulance. R.R.O. 1990, Reg. 855, s. 65; O. Reg. 566/06, s. 3; O. Reg. 421/10, s. 12; O. Reg. 188/19, s. 2.

66. Life rafts shall be,

- (a) sufficient in number so that their combined capacity is capable of accommodating at least two workers more than the maximum number of workers present at any time;
- (b) so located that one half of the life rafts are on one side of the rig and the balance on another side; and
- (c) equipped with first aid supplies. R.R.O. 1990, Reg. 855, s. 66.

67. A life-buoy shall be,

- (a) equipped with a line approved by Canadian Coast Guard whose length is at least one and one-half times the distance from the life-buoy station to the water line at shallow drafts;
- (b) located so as to be readily available to any worker; and
- (c) stored in a location which is clearly identified by a sign or other means. R.R.O. 1990, Reg. 855, s. 67; O. Reg. 421/10, s. 13.

68. A rig shall be equipped with,

- (a) self-contained breathing apparatus sufficient in number for the working crew, located in areas readily available to the working area;
- (b) at least two portable hydrogen sulphide gas detectors;
- (c) at least two portable combustible gas detectors; and
- (d) at least two portable oxygen gas detectors. R.R.O. 1990, Reg. 855, s. 68.

69. A rig shall be equipped with survival suits,

- (a) approved by Canadian Coast Guard;

- (b) sufficient in number for at least two workers more than the maximum number of workers present at any time; and
- (c) located in areas convenient to working, accommodation and survival craft embarkation areas. R.R.O. 1990, Reg. 855, s. 69; O. Reg. 421/10, s. 14.

70. A rig shall be equipped with fire protection and detection equipment. R.R.O. 1990, Reg. 855, s. 70.

71. A rig shall have a general alarm system consisting of a hailer or public address system that is audible in the workplace. R.R.O. 1990, Reg. 855, s. 71.

72. A general alarm shall be sounded to alert workers when there is a danger to,

- (a) the safety of the workers;
- (b) the security of the drilling unit or the well; or
- (c) the health of the workers due to the presence of toxic or combustible gases. R.R.O. 1990, Reg. 855, s. 72.

73. A rig shall have a radio communication system that,

- (a) includes a very high frequency marine radio telephone;
- (b) includes a radio capable of communicating with any support craft used in connection with the drilling operations;
- (c) has an emergency back-up system; and
- (d) has a competent person who is available to,
 - (i) maintain a listening watch on the 156.8 MHz frequency, and
 - (ii) monitor all movements of any support craft operating between the rig and the shore. R.R.O. 1990, Reg. 855, s. 73; O. Reg. 421/10, s. 15.

74. A helicopter used in conjunction with an offshore rig shall carry a sufficient number of immersion suits to provide one for each crew member and passenger when surface water temperature is below 18° Celsius. R.R.O. 1990, Reg. 855, s. 74.

75. Where a helicopter deck on a rig is used it shall be,

- (a) so located as to have an unobstructed approach path on at least a 210° sector;
- (b) capable of supporting any type of helicopter that is likely to land on

it;

(c) equipped with,

- (i) tie-down devices for at least one helicopter,
- (ii) internationally recognized markings,
- (iii) deck lights suitable for night flying where night flights are made,
- (iv) a non-skid deck surface, and
- (v) safety nets around the perimeter of the deck;

(d) equal to or larger than the rotor diameter of any single-main rotor helicopter that is likely to land on the deck; and

(e) kept clear of obstructions. R.R.O. 1990, Reg. 855, s. 75.

76. Rigs shall not be used for helicopter refuelling. R.R.O. 1990, Reg. 855, s. 76.

77. A personnel transfer basket shall,

- (a) not be used to transfer cargo except in an emergency;
- (b) only be used under conditions of good visibility and weather;
- (c) be raised or lowered over water to the greatest extent practicable; and
- (d) be operated by a competent person. R.R.O. 1990, Reg. 855, s. 77.

78. Living quarters for the drilling crews shall be,

- (a) equipped with at least four self-contained breathing apparatus;
- (b) clean and sanitary;
- (c) capable of being heated to at least 20° Celsius; and
- (d) equipped with a smoke detector and alarm in each room. R.R.O. 1990, Reg. 855, s. 78.

79. A rig shall have,

- (a) its hull, superstructure, bulkheads and decks constructed of material at least as resistant to fire as steel;
- (b) a means of embarking all workers so as not to endanger them;
- (c) a system of ventilation adequate to ensure that the gas, vapour, dust or fume does not reach a hazardous concentration;

- (d) ventilators, ports and other openings in any room so arranged that they can be closed;
- (e) its derrick or mast constructed to support any load likely to be applied to it without exceeding the maximum rated load; and
- (f) its drilling depth limited to comply with clause (e). R.R.O. 1990, Reg. 855, s. 79.

80. Drilling equipment shall be constructed to withstand all loads or pressure applied to it without exceeding the maximum rated load. R.R.O. 1990, Reg. 855, s. 80.

81. A cathead shall,

- (a) be operated by a competent person;
- (b) when a rope is manually operated on it, be,
 - (i) equipped with a blunt smooth-edged rope divider that has a clearance from the friction surface of the cathead of seven millimetres or less, and
 - (ii) operated only when the operating area is clear and the portion of the rope not in use is coiled or spooled;
- (c) be located so that there is at least 500 millimetres of working area between the outer flanges and a substructure, guardrail or wall;
- (d) have its controls attended while in use;
- (e) when a rope or line is in use, have all other ropes and lines placed so that they cannot come in contact with,
 - (i) the cathead, or
 - (ii) the rope or line in use on the cathead;
- (f) when automatic, have a separate control except where,
 - (i) dual purpose controls are used, and
 - (ii) a locking device prevents an automatic cathead from being accidentally engaged while the other is in operation;
- (g) have a key seat and projecting key covered with a smooth thimble or plate;
- (h) when unattended, be kept free of contact with any rope or line; and
- (i) have only ropes or lines free from splices come in contact with the

friction surface. R.R.O. 1990, Reg. 855, s. 81; O. Reg. 421/10, s. 16.

82. A travelling block shall,

- (a) be equipped with securely attached sheave guards;
- (b) be free of projecting bolts, nuts, pins or parts; and
- (c) have any hook to which equipment is attached equipped with,
 - (i) a safety latch, or
 - (ii) a wire rope safety line. R.R.O. 1990, Reg. 855, s. 82.

83. A counterweight above a derrick floor, when not fully encased or running in permanent guides, shall be held to the frame of the derrick with a wire rope safety line that,

- (a) is not less than sixteen millimetres in diameter; and
- (b) will prevent the counterweight from coming within 2.4 metres of the floor. R.R.O. 1990, Reg. 855, s. 83.

84. A make-up or breakout tool shall have a safety device that prevents its uncontrolled movement. R.R.O. 1990, Reg. 855, s. 84.

85. A rotary drilling table shall not be used for final making up or initial breaking out of a pipe connection. R.R.O. 1990, Reg. 855, s. 85.

86. Drilling shall occur only if,

- (a) all workers and loose materials are clear of the drill;
- (b) visual obstructions are removed; and
- (c) other measures are taken to protect workers from hazards created by the cathead and tong lines. R.R.O. 1990, Reg. 855, s. 86.

87. A hoisting rope, chain, sling or fitting shall,

- (a) not be loaded beyond the safe-working load;
- (b) not be used to raise or lower a worker, other than an injured worker in case of emergency; and
- (c) have the safe-working load established by,
 - (i) an engineer, or
 - (ii) the manufacturer. R.R.O. 1990, Reg. 855, s. 87.

88. A hoisting rope shall be,

- (a) securely fastened to the winding drum with at least five full wraps remaining on the drum at any time;

- (b) removed from a drum only when the travelling block is,
 - (i) lying on the derrick floor, or
 - (ii) supported by means of a separate wire rope; and
- (c) equipped with a reliable weight indicator that, if hung above the floor, is secured by means of a safety line or chain. R.R.O. 1990, Reg. 855, s. 88.

89. Stairways shall be installed,

- (a) beside the ramp to a derrick floor and extending from the deck to the derrick floor; and
- (b) at the outer end of a walkway which is sixty-one centimetres or more above the deck and extending from the deck to the walkway. R.R.O. 1990, Reg. 855, s. 89.

90. Ladder platforms shall be,

- (a) in place adjacent to a derrick ladder, other than where the ladder has a climbing device that protects the worker from falling; and
- (b) located,
 - (i) at the crown of all drill rigs, and
 - (ii) approximately equidistant but nine metres or less apart. R.R.O. 1990, Reg. 855, s. 90.

91. Where a worker is stationed on an elevated platform on the derrick or mast, an auxiliary means of escape shall,

- (a) be in place at the working platform; and
- (b) consist of a specially rigged and securely anchored escape line or system. R.R.O. 1990, Reg. 855, s. 91.

92. A pipe, kelly hose, cable or rope shall not be used to slide down, other than the escape line in case of emergency. R.R.O. 1990, Reg. 855, s. 92.

93. A pipe rack shall,

- (a) be capable of supporting the loads to which it is to be subjected;
- (b) have a means of preventing pipes and other round material from falling out of the rack; and
- (c) be loaded or unloaded in such a way that no worker is,
 - (i) on top of the load, or

- (ii) between the load and the pipe rack. R.R.O. 1990, Reg. 855, s. 93.

94. Drawworks shall,

- (a) have a reliable locking mechanism to hold down the brakes in the engaged position;
- (b) be tested for adequate brake function at the beginning of each shift;
- (c) except during drilling, be attended at all times while the hoisting drum is in motion;
- (d) except if equipped with an automatic feed control, when unattended have the brakes secured in the engaged position; and
- (e) be put in motion only when all workers are clear of machinery and lines. R.R.O. 1990, Reg. 855, s. 94.

95. (1) The quantities of explosives and detonators stored on a rig shall not exceed 50 kilograms in total. O. Reg. 421/10, s. 17.

(2) Explosives shall be stored separately from detonators. O. Reg. 421/10, s. 17.

(3) Explosives and detonators shall be stored,

- (a) as far as practicable from,
 - (i) work areas,
 - (ii) living quarters,
 - (iii) sources of ignition, and
 - (iv) sources of physical damage;
- (b) in an area protected from lightning and other sources of electricity; and
- (c) in a magazine that,
 - (i) is conspicuously marked by "DANGER — EXPLOSIVES" signs,
 - (ii) is securely constructed and locked except when required to be opened for the issue or receipt of explosives,
 - (iii) provides partitions to separate two or more explosives, and
 - (iv) is constructed or lined or covered so as to prevent the exposure of the explosive to any grit, iron, steel or similar substance. O. Reg. 421/10, s. 17.

96. A competent person shall be placed in charge of the explosives magazine to,

- (a) issue and receive explosives;
- (b) inspect the condition and contents of the magazine once a week; and
- (c) issue a report in writing to a supervisor as to the condition and contents of the magazine as identified during the inspection required in clause (b). R.R.O. 1990, Reg. 855, s. 96.

97. Electrical equipment shall,

- (a) comply with,
 - (i) the Institute of Electrical and Electronics Engineers Recommended Practice for Electrical Installations on Shipboard Standard 45-1983, if the equipment was installed before July 1, 2019, or
 - (ii) the Institute of Electrical and Electronics Engineers Recommended Practice for Electrical Installations on Shipboard Standard 45-2002, if the equipment was installed on or after July 1, 2019;
- (b) be explosion proof,
 - (i) within at least four metres horizontally from the centre line of the well bore,
 - (ii) within at least three metres vertically above the drill floor,
 - (iii) within at least three metres vertically below the drill floor,
 - (iv) within at least three metres vertically and horizontally from a mud ditch, shale shaker, degasser and mud tank, and
 - (v) in any enclosed high fire hazard area;
- (c) be suitable for its intended use; and
- (d) be equipped with two manual shut off switches located distant from each other, which will disconnect the circuit from the power plant to the drilling equipment. R.R.O. 1990, Reg. 855, s. 97; O. Reg. 421/10, s. 18.

98. Well stimulation and similar operations shall,

- (a) be equipped with a check valve as close as practicable to the well head riser, except where cementing or selective acidizing is being done;

- (b) where liquid carbon dioxide is being used, be controlled from a position on the far side of the pumping unit when viewed from the well head riser;
- (c) not be carried out until workers are removed a distance of three metres from the well head riser;
- (d) be equipped with fire protection positioned to control the increased hazard of fire where flammable fluids are being pumped by two or more pumping units, including blenders;
- (e) be equipped with bleed-off valves to release pressure before pipe connections are broken; and
- (f) have controls readily operated from the rig floor when oil savers are used. R.R.O. 1990, Reg. 855, s. 98.

99. A system used to maintain drilling fluid shall,

- (a) be equipped with a pressure relief device adequate to vent excess pressure in a controlled manner;
- (b) vent excess pressure to an area which will not endanger workers;
- (c) be designed by an engineer; and
- (d) incorporate a testing and control procedure for hydrogen sulphide where oil, water or gas has been encountered. R.R.O. 1990, Reg. 855, s. 99.

100. A blow-out prevention system shall meet the requirements of Ontario Regulation 245/97 (Exploration, Drilling and Production) made under the *Oil, Gas and Salt Resources Act*. O. Reg. 421/10, s. 19.

R.R.O. 1990, REGULATION 859**WINDOW CLEANING**

Consolidation Period: From July 1, 2022 to the e-Laws currency date.

Last amendment: 370/22.

This is the English version of a bilingual regulation.

DEFINITIONS

1. In this Regulation,

"adequate" means adequate to protect a person from the risk of damage to his or her body or health; ("adéquat")

"allowable unit stress", in relation to a material, means,

- (a) the allowable unit stress assigned to the material by Regulation 61 of the Revised Regulations of Ontario, 1990, or
- (b) where Regulation 61 of the Revised Regulations of Ontario, 1990 does not assign an allowable unit stress to the material, the allowable unit stress for the material as determined by an engineer in accordance with good engineering practice; ("contrainte spécifique permise")

"fall arrest body harness" means a harness worn by a worker that guides and distributes the impact forces of a fall by the worker by means of leg and shoulder strap supports and an upper dorsal suspension assembly; ("harnais individuel de sécurité")

"fall arrest system" means a fall arrest body harness and the system that supports it, including the lanyard, lifeline and attachment devices; ("système de sécurité")

"sill work" means the cleaning of a window by a worker standing on a sill or frame; ("travail sur appui")

"suitable" means suitable for the purpose of protecting a person from the risk of injury to his or her body or health; ("convenable")

"window" includes a skylight, canopy, roof or covering made of glass or any transparent or translucent material; ("vitre")

"window cleaning" means the cleaning of the exterior or interior surfaces of a window, the cleaning of trims and claddings which are cleaned in conjunction with a window, and any work necessary or incidental thereto. ("nettoyage des vitres") R.R.O. 1990, Reg. 859, s. 1.

APPLICATION

2. This Regulation applies to employers, including contractors and sub-contractors, who supply window cleaning services, to workers who engage in window cleaning and to owners of buildings where a worker engaging in window cleaning may fall a vertical distance of three metres or more. R.R.O. 1990, Reg. 859, s. 2.

ALTERNATIVE METHODS AND MATERIALS

3. Any procedure or the composition, design, size or arrangement of any material, object, device or thing may vary from the procedure, composition, design, size or arrangement prescribed in this Regulation if the variation affords equal or greater protection to the health and safety of workers. R.R.O. 1990, Reg. 859, s. 3.

REGISTRATION, REPORTING AND NOTICE REQUIREMENTS

4. (1) Every person who carries on the business of window cleaning or of supplying window cleaners shall register with a Director within thirty days of starting business. R.R.O. 1990, Reg. 859, s. 4 (1); O. Reg. 523/92, s. 1 (1).

(2) A registration under subsection (1) shall be made by filing with the Director of the Ministry of Labour a statement setting out,

- (a) in the case of an individual or sole proprietorship,
 - (i) the name in full, regular business address and business telephone number of the individual or sole proprietor, and
 - (ii) the residence address of the individual or sole proprietor;
- (b) in the case of a partnership or syndicate,
 - (i) the name or style of the partnership or syndicate,
 - (ii) the business address and telephone number of the partnership or syndicate, and
 - (iii) the particulars required by clauses (a) and (c) for the individual or corporate partners, as the case may be;
- (c) in the case of a corporation,
 - (i) the name of the corporation,
 - (ii) the date of incorporation,
 - (iii) the province or jurisdiction in which the corporation was incorporated,

- (iv) the main business address and telephone number of the corporation, and
 - (v) the names in full and residence addresses of the principal officers of the corporation and the date when each became a principal officer;
 - (d) the average number of workers employed by the employer to engage in window cleaning;
 - (e) the firm number assigned to the employer by the Workers' Compensation Board; and
 - (f) the rate number assigned to the employer by the Workers' Compensation Board. R.R.O. 1990, Reg. 859, s. 4 (2); O. Reg. 523/92, s. 1 (2).
- (3) The statement referred to in subsection (2) shall be verified by the individual or sole proprietor, a partner in the partnership or syndicate, or an officer of the corporation, as the case may be. R.R.O. 1990, Reg. 859, s. 4 (3).

(4) Every person registered under this section shall notify a Director in writing of any change in the information filed under subsection (2) within thirty days after the change has taken place, setting out the change and date of the change. R.R.O. 1990, Reg. 859, s. 4 (4); O. Reg. 523/92, s. 1 (3).

5., 6. Revoked: O. Reg. 424/21, s. 1.

7. (1) Before any worker begins window cleaning at a building for which a suspended scaffold, boatswain's chair or similar single-point suspension equipment is used, every employer, contractor and sub-contractor who proposes to carry out window cleaning at the building shall give notice of the proposed window cleaning by telephone to an inspector in the office of the Ministry of Labour that is nearest to the building. R.R.O. 1990, Reg. 859, s. 7 (1); O. Reg. 523/92, s. 2.

- (2) The notice mentioned in subsection (1) shall include,
- (a) the name, address and telephone number of the employer, contractor or sub-contractor;
 - (b) a description of the equipment to be used;
 - (c) the number of workers who will engage in window cleaning;
 - (d) the anticipated starting date and duration of window cleaning;
 - (e) the address of the building; and
 - (f) the name, workplace address and telephone number of the

supervisor of the window cleaning. R.R.O. 1990, Reg. 859, s. 7 (2).

SAFETY PRECAUTIONS AND REQUIREMENTS

8. Every person who engages in window cleaning shall be at least eighteen years of age. R.R.O. 1990, Reg. 859, s. 8.

9. (1) Every worker who engages in window cleaning shall wear or use personal protective clothing, equipment or devices that protect the worker from the particular hazard to which the worker may be exposed.

(2) Every worker shall be instructed and trained in the care and use of any protective clothing, equipment or device before the worker wears or uses it. R.R.O. 1990, Reg. 859, s. 9.

10. (1) If a worker who is not working from a ladder is exposed to the hazard of falling more than three metres, the worker shall use a fall arrest system that is adequately secured to a fixed support and arranged so that the worker cannot fall freely for a vertical distance of more than 1.5 metres.

(2) The fixed support mentioned in subsection (1) shall be able to resist all arrest forces when a worker falls.

(3) The fall arrest system mentioned in subsection (1),

(a) shall arrest any fall by the worker without applying a peak force to the worker greater than 8 kilonewtons; and

(b) shall permit the worker to remain suspended safely in it for a period of at least thirty minutes.

(4) Where a suspended scaffold,

(a) has at least two independent means of support or suspension; and

(b) is designed, constructed and maintained so that the failure of one means of support or suspension will not upset the scaffold,

the fall arrest body harness or lanyard may be attached to the scaffold.

(5) A lanyard used in a fall arrest system shall have a nominal diameter of at least sixteen millimetres and be made of nylon rope or another durable and adequate material.

(6) A lifeline used in a fall arrest system,

(a) shall be used by only one worker at a time;

(b) shall be free from the danger of being chafed or cut;

(c) shall be suspended separately and independently from any

suspended scaffold, boatswain's chair or similar single-point suspension equipment;

- (d) shall have a nominal diameter of at least sixteen millimetres;
- (e) shall be made of polypropylene or another durable material with equivalent impact strength that provides equal protection to a worker;
- (f) when in a vertical position, shall extend to the ground or the level of egress;
- (g) shall be inspected for wear prior to each day's use by a competent person who shall report any defects or damage to a supervisor; and
- (h) shall not be used when defective or damaged.

(7) No lanyard, lifeline and fall arrest body harness that has arrested a fall by a worker shall be reused. R.R.O. 1990, Reg. 859, s. 10.

11. Every work area, route to and from a work area and a working platform shall be treated with sand or similar material when necessary to ensure a firm footing. R.R.O. 1990, Reg. 859, s. 11.

12. If practicable, signs containing the words "Danger — Work Overhead" in legible letters shall be posted in prominent locations and in sufficient number to warn pedestrians that window cleaning is being carried out overhead. R.R.O. 1990, Reg. 859, s. 12.

13. Barriers, warning signs or other safeguards for the protection of workers shall be used where vehicular or pedestrian traffic may endanger the safety of any worker or disturb the worker's support lines or lifeline. R.R.O. 1990, Reg. 859, s. 13.

14. (1) Access to and egress from a workplace that is above ground level shall be by stairs, runway, ramp or ladder.

(2) Despite subsection (1), access to and egress from a suspended scaffold, boatswain's chair or similar single-point suspension equipment may be,

- (a) directly from a floor or roof where the suspended scaffold, boatswain's chair or similar single-point suspension equipment is adjacent to the floor or roof; or
- (b) from ground level where the suspended scaffold, boatswain's chair or single-point suspension equipment is at ground level. R.R.O. 1990, Reg. 859, s. 14.

15. Every container for a combustible, corrosive or toxic substance,

- (a) shall be suitable for the substance that the container holds; and
- (b) shall be clearly labelled to identify,
 - (i) the substance it contains,
 - (ii) the hazards that are involved in the use of the substance, and
 - (iii) the precautions to be taken in handling, using, storing and disposing of the substance. R.R.O. 1990, Reg. 859, s. 15.

16. Materials to be used on, or removed from, a work site shall be stored, moved, lifted and transported in a manner that does not endanger a worker. R.R.O. 1990, Reg. 859, s. 16.

LADDERS AND RELATED EQUIPMENT

17. (1) Every ladder,

- (a) shall have strength, stiffness and stability adequate to support any load likely to be applied to it;
- (b) shall be free from broken or loose members or other faults;
- (c) shall have evenly spaced rungs;
- (d) shall be equipped with slip resistant feet; and
- (e) if it is made of wood, shall not be painted or coated with an opaque material.

(2) The maximum length of a ladder measured along the side rail shall not be more than,

- (a) six metres for a stepladder;
- (b) nine metres for a single ladder; and
- (c) thirteen metres for an extension or sectional ladder.

(3) Every ladder,

- (a) shall be used so as not to endanger any worker;
- (b) shall be used only in such a way that the loads applied to it will not cause the materials of which it is constructed to be stressed beyond their allowable unit stresses;
- (c) shall be placed on a firm footing and secured against slipping;
- (d) if it exceeds nine metres in length, shall be securely fastened or stabilized to prevent it from tipping or falling; and
- (e) when it is not securely fastened, shall be inclined so that the

horizontal distance from the top support to the foot of the ladder is not less than one-quarter and not more than one-third of the length of the ladder.

(4) When a stepladder is being used,

- (a) the legs shall be fully spread and the spreader shall be locked; and
- (b) the top and the pail shelf of the stepladder shall not be used as a step. R.R.O. 1990, Reg. 859, s. 17.

18. No barrel, box or other loose object,

- (a) shall be used by a worker engaged in window cleaning to stand upon while working; or
- (b) shall be used to support a ladder, scaffold or working platform. R.R.O. 1990, Reg. 859, s. 18.

19. No platform, bucket, basket, load, hook or sling that is supported by a fork-lift truck, front-end loader or other similar machine shall be used as a workplace for window cleaning. R.R.O. 1990, Reg. 859, s. 19.

20. (1) Every guardrail shall consist of a top rail, intermediate rail and toeboard, and be capable of resisting any load likely to be applied to it.

(2) The top rail of a guardrail shall be located not less than 910 millimetres and not more than 1.07 metres above the surface on which it is installed. R.R.O. 1990, Reg. 859, s. 20.

SCAFFOLDS, BOATSWAIN'S CHAIRS AND RELATED EQUIPMENT

21. (1) The erection, alteration or dismantling of a scaffold shall be carried out under the supervision of a competent person.

(2) Work shall not be carried out on or under a scaffold or working platform that is being erected, altered or dismantled unless it is carried out from a part of the scaffold or working platform that complies with the requirements of sections 22 to 31. R.R.O. 1990, Reg. 859, s. 21.

22. (1) Every scaffold,

- (a) shall be capable of supporting at least,
 - (i) two times the maximum load to which it is likely to be subjected without exceeding the allowable unit stresses for the materials of which it is constructed, and
 - (ii) four times the maximum load to which it is likely to be subjected without overturning;
- (b) shall not be loaded in excess of the maximum load it can reasonably

be expected to support and in any event shall not be loaded in excess of the maximum load described in clause (a);

- (c) shall be constructed of suitable structural materials;
- (d) shall have horizontal members that prevent lateral movement and that do not have splices between the points of support;
- (e) shall have footings, sills or supports that are sound, rigid and capable of supporting without unreasonable settlement or deformation at least two times the maximum load to which the scaffold is likely to be subjected;
- (f) if it consists of a structural system of tubular metal frames, shall have connecting devices between components that provide positive engagement in compression and tension;
- (g) shall have all fittings, gears, base plates and wheels installed according to manufacturer's instructions;
- (h) shall have safety catches on all hooks; and
- (i) shall be adequately secured at vertical intervals not exceeding three times the least lateral dimension of the scaffold, measured at the base in order to prevent lateral movement of the scaffold.

(2) Clauses (1) (d) to (i) do not apply in respect of a suspended scaffold.

(3) A scaffold that exceeds fifteen metres in height above its base support, and a scaffold constructed of a tube and clamp system that exceeds ten metres in height above its base support shall be designed by an engineer and erected in accordance with the design. R.R.O. 1990, Reg. 859, s. 22.

23. Every scaffold mounted on castors or wheels,

- (a) shall have a height which does not exceed three times the smallest lateral dimension of the scaffold when it is measured at the base, or measured between the outriggers;
- (b) shall be equipped with a suitable braking device on each castor or wheel; and
- (c) shall have the brakes engaged when a worker is on the scaffold or the scaffold is unattended. R.R.O. 1990, Reg. 859, s. 23.

24. The working platform of a scaffold,

- (a) shall be designed, constructed and maintained to support all loads to which it may be subjected without exceeding the allowable unit stresses for the materials of which it is constructed, and in

any event shall support not less than 2.4 kilonewtons per square metre;

- (b) shall be at least 460 millimetres wide;
- (c) shall be provided with a guardrail at each open side and at the end of the platform;
- (d) if the platform consists of sawn lumber planks, shall have planks of Number 1 grade spruce that,
 - (i) bear a legible grade identification stamp or bear a permanent grade identification mark,
 - (ii) are at least forty-eight millimetres thick by 250 millimetres wide with a span not exceeding 2.1 metres,
 - (iii) overhang their supports by not less than 150 millimetres and not more than 300 millimetres, and
 - (iv) are cleated or otherwise secured against slipping; and
- (e) if the platform consists of planks manufactured of laminated wood, metal or a combination of materials, shall consist of planks tested in accordance with good engineering practice to demonstrate their structural equivalence to the sawn lumber planks specified in clause (d). R.R.O. 1990, Reg. 859, s. 24.

25. Sections 26 to 30 apply in respect of every,

- (a) suspended scaffold that is permanently installed on a building or structure;
- (b) suspended scaffold that is transported in component form and is assembled for use at a work site; and
- (c) boatswain's chair or similar single-point suspension equipment intended for the support of one worker. R.R.O. 1990, Reg. 859, s. 25.

26. All mechanically or electrically operated equipment used in connection with equipment described in section 25,

- (a) shall be suitable for the purpose for which it is used;
- (b) shall have legible operating and maintenance instructions of the manufacturer affixed to the equipment;
- (c) shall be operated, inspected and maintained in accordance with the manufacturer's instructions;
- (d) shall not be used in a manner which endangers a worker; and

- (e) shall not be used when a component which may affect its safe operation is defective or damaged. R.R.O. 1990, Reg. 859, s. 26.

27. (1) Every primary suspension line and lifeline used in connection with equipment described in section 25,

- (a) shall be rigged in accordance with generally accepted rigging practice;
- (b) shall be rigged so that each line hangs vertically from the roof or access level to the ground or level of egress of a worker using the line;
- (c) shall have a breaking strength of at least ten times the static load that the line is intended to support;
- (d) shall have each connecting end wrapped around a protective thimble and securely fastened,
 - (i) by means of a swagged fitting or eye splice, if applied by the manufacturer of the line, or
 - (ii) if the line is a wire rope, by a minimum of three clamps;
- (e) shall be inspected before each day's use by a competent person who shall report any defects or damage to a supervisor; and
- (f) shall not be used when defective or damaged.

(2) Every primary suspension line for a boatswain's chair or similar single-point suspension equipment that is made of organic or polymer fibres,

- (a) shall be doubled from the anchor point or point of suspension of the line to the ground or egress level;
- (b) shall be permanently marked with,
 - (i) the name of the manufacturer,
 - (ii) the date of manufacture of the line, and
 - (iii) the length of the line;
- (c) shall be protected from abrasion;
- (d) shall be used only with a descent control or similar device;
- (e) shall be tested by a recognized testing laboratory twenty-four months from the date of manufacture of the line and once every twelve months thereafter for compliance with clause (1) (c); and

- (f) shall be discarded,
 - (i) where it is found not to comply with clause (1) (c),
 - (ii) in accordance with the manufacturer's recommendations, or
 - (iii) when it is no longer safe for use,

whichever occurs first.

- (3) Every descent control or similar device referred to in clause (2) (d),
 - (a) shall be approved by the manufacturer of the device for window cleaning; and
 - (b) shall be used in accordance with the installation, operating and maintenance instructions of the manufacturer, which instructions shall be kept available for the inspection of an inspector. R.R.O. 1990, Reg. 859, s. 27.

28. Every boatswain's chair,

- (a) shall have a seat at least 600 millimetres long and 250 millimetres wide of one piece construction capable of supporting 225 kilograms;
- (b) shall be supported by a sling constructed of wire rope of at least nine millimetres that crosses underneath the seat;
- (c) shall not be used where the descent exceeds ninety metres;
- (d) shall only be used to clean windows within arm's reach of a worker who is freely suspended on the primary support line; and
- (e) shall not be used when a worker is using corrosive substances or solutions for window cleaning. R.R.O. 1990, Reg. 859, s. 28.

29. (1) Every static or horizontal line that is rigged between anchor points and to which lifelines or primary support lines are directly attached shall be used as an engineer directs, and the engineer shall certify the maximum load to be applied to the static or horizontal line.

(2) The support capability of an anchor point shall exceed the total breaking strength of all support lines attached to it. R.R.O. 1990, Reg. 859, s. 29.

30. (1) Every outrigger beam, cornice hook and parapet wall hook that is used to support a primary support line,

- (a) shall be capable of supporting at least four times the maximum load to which it may be subjected,

- (i) without overturning, and
 - (ii) without exceeding the allowable unit stress for the materials of which it is constructed;
- (b) shall be constructed of steel, aluminum or equivalent material; and
- (c) shall be tied back to a fixed support so as to prevent movement of the outrigger beam, cornice hook or parapet wall hook.
- (2) Every outrigger beam that is used to support a primary support line,
- (a) shall have counterweights that are manufactured for the purpose, marked to indicate their weight and securely attached to the outrigger beam;
 - (b) shall be accompanied by the supplier's or manufacturer's instructions indicating the number of counterweights necessary for each arrangement of the beam that may be employed for window cleaning and the load that the beam can bear for each arrangement; and
 - (c) if it is positioned on a rolling undercarriage, shall have the undercarriage fixed to prevent the counterweights from moving while a worker is suspended by the primary support line. R.R.O. 1990, Reg. 859, s. 30.
- 31.** (1) Every worker on a suspended scaffold, boatswain's chair or similar single-point suspension equipment shall have an effective means of summoning assistance in case of emergency.
- (2) Every worker who is on, or is in the process of getting on or off a suspended scaffold or boatswain's chair or similar single-point suspension equipment shall be protected by a fall arrest system. R.R.O. 1990, Reg. 859, s. 31.

ELECTRICAL HAZARDS

- 32.** Electrical equipment, power lines and insulating materials shall be suitable for its or their use and be installed, maintained, modified and operated so as not to present a hazard to a worker. R.R.O. 1990, Reg. 859, s. 32.
- 33.** Tools, ladders, scaffolding and other equipment that are capable of conducting electricity and that may endanger the safety of anyone shall not be used or left in such proximity to any energized electrical installation, equipment or conductor as to make electrical contact with an energized conductor. R.R.O. 1990, Reg. 859, s. 33.
- 34.** (1) No person other than a person authorized by a building owner

or the owner's representative shall enter a room or enclosure containing exposed energized electrical parts.

(2) The building owner shall place signs conspicuously at every entrance to a room or other enclosure that contains exposed energized electrical parts warning of the danger of exposed energized electrical parts and stating that only persons authorized by the building owner or the owner's representative may enter the room or enclosure. R.R.O. 1990, Reg. 859, s. 34.

35. (1) No object or piece of equipment shall be brought closer to an energized outdoor overhead electrical conductor with the voltage rating set out in Column 1 of the Table than the distance specified opposite thereto in Column 2.

TABLE

Column 1	Column 2
Voltage Rating of Conductor	Minimum Distance
From 750 up to and including 150,000 volts	3 metres
Over 150,000 up to and including 250,000 volts	4.5 metres
Over 250,000 volts	6 metres

(2) Subsection (1) does not apply where,

- (a) mats, shields or other protective devices adequate to ensure that a person is protected from electrical shock and burns have been installed by the owner of the conductor; and
- (b) the person who is bringing the object or equipment or is causing the object or equipment to be brought within the minimum distance specified in subsection (1) has been instructed in and is using procedures adequate to ensure the protection of the worker from electrical shock and burns. R.R.O. 1990, Reg. 859, s. 35.

MISCELLANEOUS EQUIPMENT

36. Every gear, pulley or belt that is part of a suspended scaffold shall be guarded or fenced unless the gear, pulley or belt is located and constructed so that it will not endanger any worker. R.R.O. 1990, Reg. 859, s. 36.

37. (1) Every rope or cable used by a mechanically powered hoisting device,

- (a) shall be steel wire rope of the type, size, grade and construction that is recommended by the manufacturer for the hoisting device;

- (b) shall be suitable for the sheaves and the drum with which it is used;
- (c) shall not be spliced; and
- (d) shall be suitably lubricated to prevent its corrosion or wear.

(2) Steel wire rope shall not be used by a mechanically powered hoisting device if,

- (a) six randomly distributed wires are broken in one rope lay, or three or more wires are broken in one strand in one rope lay;
- (b) the wear on the rope exceeds one-third of the original diameter of the outside individual wires; or
- (c) there is evidence of kinking, bird-caging, corrosion or any other damage to the rope resulting in distortion of the rope structure that may result in rope failure. R.R.O. 1990, Reg. 859, s. 37.

38. (1) Every hook shall be equipped with a safety catch.

(2) Every load-bearing hook shall have its load rating legibly cast or stamped on it in a location where it can be readily seen.

(3) No hook shall be used that has,

- (a) a crack;
- (b) more than the normal throat opening; or
- (c) any twist from the plane of the unbent hook. R.R.O. 1990, Reg. 859, s. 38.

DUTIES OF THE OWNER OF A BUILDING

39. (1) Every owner of a building where a suspended scaffold, boatswain's chair or similar single-point suspension equipment is to be used for window cleaning shall prepare a sketch or sketches showing all anchor points and related structures on the building that are suitable and adequate for the attachment of the suspended scaffold, boatswain's chair or similar single-point suspension equipment and the lifeline.

(2) The building owner shall provide a copy of the sketch or sketches mentioned in subsection (1) to the person supplying the window cleaning services before the work is begun and no employer may permit a worker to engage in window cleaning using a suspended scaffold, boatswain's chair or similar single-point suspension equipment until the employer has received a copy of the sketch or sketches.

(3) The building owner shall post a copy of the sketch or sketches mentioned in subsection (1) at the building near the entrance to the roof.

R.R.O. 1990, Reg. 859, s. 39.

40. (1) Every owner of a building where sill work is done shall prepare a sketch or sketches showing all anchor points and related structures on the building that are suitable and adequate for the attachment of a lifeline for a worker who performs the sill work.

(2) The building owner shall provide a copy of the sketch or sketches mentioned in subsection (1) to the person supplying the window cleaning services before the sill work is begun and no employer may permit a worker to do sill work until the employer has received a copy of the sketch or sketches.

(3) The building owner shall post a copy of the sketch or sketches mentioned in subsection (1) in a conspicuous place where the sketch or sketches are to come to the attention of any worker who does sill work.
R.R.O. 1990, Reg. 859, s. 40.

41. (1) The owner of a building mentioned in section 39 or 40 shall cause all anchor points and permanently-installed suspended scaffolds to be inspected by a competent person,

- (a) before being used for the first time;
- (b) thereafter as often as necessary but not less frequently than recommended by the manufacturer of the anchor points or the suspended scaffolds, as the case may be, and in any case, at least once a year; and
- (c) when informed under section 43.

(2) Maintenance and repairs of a permanently-installed suspended scaffold shall be performed in accordance with the manufacturer's instructions.

(3) The competent person making the inspection required by subsection (1) shall immediately upon completion of the inspection report to the building owner any defects or hazardous conditions detected in the anchor points and any permanently-installed suspended scaffold.

(4) A building owner shall ensure that any faulty anchor point is repaired and is suitable for use for window cleaning and sill work before being used.

(5) A building owner shall keep a record of the inspections of any anchor points and any permanently-installed suspended scaffold at a building in a log book to be maintained and retained as long as the anchor points and suspended scaffold are used, showing,

- (a) the date on which each inspection is made;

- (b) the name and signature of the person making the inspection; and
- (c) any modifications or repairs made to an anchor point or a suspended scaffold, including the date they are made and the name and signature of the person making the modifications or repairs. R.R.O. 1990, Reg. 859, s. 41.

DUTIES OF EMPLOYERS, SUPERVISORS AND WORKERS

42. (1) Every employer who proposes to carry out window cleaning using a suspended scaffold, boatswain's chair or similar single-point suspension equipment or to carry out sill work shall prepare a work plan in writing, signed by the employer, indicating the manner in which any primary support lines and lifelines used are to be attached to the anchor points or related structures shown on any sketch mentioned in subsection 39 (1) or 40 (1), and setting such other information as may be required for the safety of workers.

(2) The employer shall cause a copy of the work plan referred to in subsection (1) to be provided to each worker who engages in window cleaning or sill work at the building and shall retain a copy for examination by an inspector.

(3) No worker shall begin window cleaning that requires the use of a suspended scaffold, boatswain's chair or similar single-point suspension equipment and no worker may begin doing sill work until the worker has received a copy of the work plan referred to in subsection (1). R.R.O. 1990, Reg. 859, s. 42.

43. If an employer, supervisor or worker believes that any anchor point or related structure that is used to support a suspended scaffold, suspended work platform, boatswain's chair, similar single-point suspension equipment or lifeline is defective or inadequate, the employer, supervisor or worker shall inform the building owner of this fact immediately. R.R.O. 1990, Reg. 859, s. 43.

44. (1) Every employer of a worker who engages in window cleaning using a suspended scaffold, boatswain's chair or similar single-point suspension equipment and every contractor and sub-contractor who proposes to carry out window cleaning in that manner shall appoint a supervisor.

(2) A supervisor appointed under subsection (1) shall visit the location of the window cleaning operation at least once daily. R.R.O. 1990, Reg. 859, s. 44.

45. (1) A safety training program shall be established and maintained by every employer whose workers engage in window cleaning using

suspended scaffolds, boatswain's chairs or similar single-point suspension equipment to train the workers in common core skills for the safe use of such scaffolds, boatswain's chairs and similar single-point suspension equipment.

(2) The common core skills referred to in subsection (1) shall include,

- (a) the proper rigging of support lines;
- (b) the inspection for wear of primary support lines and lifelines;
- (c) the safe use of descent control devices;
- (d) the proper use of fall arrest body harnesses including accepted methods for attaching lifelines to buildings or structures; and
- (e) the safe use of suspended scaffolds and boatswain's chairs and similar single-point suspension equipment.

(3) No worker who has not successfully completed the training program referred to in subsection (1) shall be permitted to engage in window cleaning using a suspended scaffold, boatswain's chair or similar single-point suspension equipment.

(4) Subsection (3) does not apply to a worker who,

- (a) is being instructed in the safe use of window cleaning and fall arrest equipment; and
- (b) is accompanied by a person who has successfully completed the training program referred to in subsection (1).

(5) Every employer shall establish and maintain in writing a list of workers who have successfully completed the training program referred to in subsection (1). R.R.O. 1990, Reg. 859, s. 45.

R.R.O. 1990, REGULATION 856**ROLL-OVER PROTECTIVE STRUCTURES**

Consolidation Period: From July 1, 2022 to the e-Laws currency date.

Last amendment: 371/22.

This is the English version of a bilingual regulation.

1. In this Regulation,

“machine” means a self-propelled vehicle, operated by one or more persons who ride on or in it, that is a tractor, bulldozer, scraper, front-end loader, skidder, dumper, grader or compactor other than an asphalt compactor; (“engin”)

“restraining device” means a seat belt with or without an over-the-shoulder strap; (“dispositif de retenue”)

“roll-over protective structure”, in relation to a machine, means a structure that protects every operator of the machine who is wearing a restraining device from being crushed if the machine rolls over. (“structure de protection contre le capotage”) R.R.O. 1990, Reg. 856, s. 1.

2. This Regulation does not apply in respect of a machine,

- (a) that is rated by its manufacturer at fifteen kilowatts or less and has a tare mass of 700 kilograms or less;
- (b) that was manufactured before 1980 and is not factory-equipped with adaptors to accept a roll-over protective structure; or
- (c) that is used primarily underground in a mine. R.R.O. 1990, Reg. 856, s. 2.

3. (1) No person shall use or operate a machine unless it is equipped with a roll-over protective structure that meets the requirements of subsection 5 (1) and a restraining device that meets the requirements of section 6 for every operator of the machine. R.R.O. 1990, Reg. 856, s. 3 (1).

(2) No person shall use or operate a machine that is equipped with a restraining device unless the person is wearing the restraining device. R.R.O. 1990, Reg. 856, s. 3 (2).

4. Despite subsection 3 (1), a restraining device is not required on a

skidder that is used in logging. R.R.O. 1990, Reg. 856, s. 4.

5. (1) Every roll-over protective structure,

- (a) shall be designed, constructed and maintained so that, when the machine to which it is fastened is travelling at a forward speed of 16 kilometres per hour, engages a thirty degree slope and rolls 360 degrees about its longitudinal axis on a hard clay surface,
 - (i) the roll-over protective structure will withstand the impact forces,
 - (ii) upon impact, no part of the roll-over protective structure will enter the space of the machine that is normally occupied by its operator, and
 - (iii) the roll-over protective structure will support the machine in an upside-down attitude without any part of the roll-over protective structure entering the space of the machine that is normally occupied by its operator;
- (b) shall bear a legible label indicating,
 - (i) the name and address of the manufacturer of the roll-over protective structure or, if it is custom built, the name and address of the engineer referred to in subsection (2), and
 - (ii) the make, model and maximum mass of the machine that the roll-over protective structure is designed to fit;
- (c) shall be securely fastened to the frame of the machine; and
- (d) shall be capable of withstanding all forces to which it is likely to be subjected. R.R.O. 1990, Reg. 856, s. 5 (1).

(2) Every custom built roll-over protective structure, every repair to such a structure and every custom built modification to a roll-over protective structure shall be certified as meeting the requirements of clause (1) (a) by an engineer. R.R.O. 1990, Reg. 856, s. 5 (2).

(3) Every repair to a roll-over protective structure other than a custom built structure shall be approved by the manufacturer of the structure as meeting the requirements of clause (1) (a). R.R.O. 1990, Reg. 856, s. 5 (3).

6. Every restraining device shall be designed, constructed, installed and maintained,

- (a) so that the person using the device is secured in position and within the space protected by the roll-over protective structure if

the machine to which it is fastened is travelling at a forward speed of 16 kilometres per hour, engages a thirty degree slope and rolls 360 degrees about its longitudinal axis on a hard clay surface; and

- (b) so as to minimize injury to the person using the device, in case of an accident. R.R.O. 1990, Reg. 856, s. 6.

ONTARIO REGULATION 490/09**DESIGNATED SUBSTANCES**

Consolidation Period: From January 1, 2020 to the e-Laws currency date.

Last amendment: 189/19.

This is the English version of a bilingual regulation.

Definitions

1. In this Regulation,

“airline respirator” means a respirator and air supply hose with a hood or helmet, a tight-fitting facepiece, or a loose-fitting facepiece or visor, that is supplied with compressed breathing air from a compressed breathing air system; (“appareil de protection respiratoire à adduction d’air”)

“air-purifying respirator” means a respirator with an air-purifying filter, cartridge or canister that removes specific air contaminants by passing ambient air through the air-purifying element; (“appareil de protection respiratoire à épuration d’air”)

“arsenic” means,

- (a) arsenic in its elemental form,
- (b) arsenic in inorganic compounds, except arsine, and
- (c) arsenic in organic form only where both inorganic and organic compounds of arsenic are present; (“arsenic”)

“asbestos” means any of the following fibrous silicates:

- 1. Actinolite.
- 2. Amosite.
- 3. Anthophyllite.
- 4. Chrysotile.
- 5. Crocidolite.
- 6. Tremolite; (“amiante”)

“assigned protection factor” means the anticipated level of respiratory protection that would be provided by a properly functioning respirator

or class of respirators to properly fitted and trained users; ("facteur de protection caractéristique")

"C" or "ceiling limit" means the maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time; ("C", "valeur C" ou "valeur plafond")

"Code for Medical Surveillance" means the Code for Medical Surveillance for Designated Substances in Ontario Regulation 490/09 (2019) under the Occupational Health and Safety Act published by the Ministry, dated 2019 and available on a website of the Government of Ontario; ("code régissant la surveillance médicale")

"coke oven emissions" means the benzene soluble fraction of total particulate matter of the substances emitted into the atmosphere from metallurgical coke ovens including condensed vapours and solid particulates; ("fumées de four à coke")

"direct-reading instrument" means a combustible gas indicator, oxygen meter, colorimetric indicator tube, organic vapour monitor or other instrument that can immediately detect and provide a measurement of an airborne chemical agent; ("instrument à lecture directe")

"exposure" means exposure by inhalation, ingestion, skin absorption or skin contact; ("exposition")

"HEPA filter" means a high efficiency particulate air filter that is at least 99.97 per cent efficient in removing particles with a mean aerodynamic diameter of 0.3 micrometres from the air; ("filtre HEPA")

"IDLH atmosphere" means an atmosphere that poses an immediate threat to life or that will cause irreversible adverse health effects or impair a worker's ability to escape from the environment; ("atmosphère DIVS")

"isocyanates" means organic isocyanates; ("isocyanates")

"joint health and safety committee" includes, in addition to a joint health and safety committee established under the Act,

- (a) a committee of like nature described in subsection 9 (4) of the Act,
- (b) an arrangement, program or system described in subsection 9 (4) of the Act in which workers or their representatives participate; ("comité mixte sur la santé et la sécurité")

"lead" means elemental lead, inorganic compounds of lead and organic compounds of lead; ("plomb")

"maximum use concentration" means the maximum concentration of an airborne designated substance that a respirator can be expected

to protect a worker using the respirator from, as determined by multiplying the assigned protection factor set out in Schedule 2 for the respirator, or, if applicable, the simulated workplace protection factor for the respirator, by the occupational exposure limit set out for the substance in Table 1; ("concentration d'utilisation maximale")

"mercury" means elemental mercury, inorganic compounds of mercury and organic compounds of mercury; ("mercure")

"metallurgical coke ovens" means a coke oven battery, including topside and its machinery, coke side and its machinery, pusher side and its machinery, the battery ends, the wharf and the screening station; ("fours à coke métallurgique")

"NIOSH" means the National Institute for Occupational Safety and Health; ("NIOSH")

"powered air-purifying respirator" means an air-purifying respirator that, by means of a powered blower worn by the user, passes ambient air through an air-purifying element and then supplies purified air to a helmet, hood, facepiece or visor worn by the user; ("appareil de protection respiratoire à épuration d'air à ventilation assistée")

"Provincial Physician" means the person employed in the Ministry as the Provincial Physician; ("médecin provincial")

"qualitative fit test" means a qualitative fit test method set out in Annex B of CSA Standard CAN/CSA-Z94.4-18, Selection, Use and Care of Respirators (September 2018); ("essai d'ajustement qualitatif")

"quantitative fit test" means a quantitative fit test method set out in Annex C of CSA Standard CAN/CSA-Z94.4-18, Selection, Use and Care of Respirators (September 2018); ("essai d'ajustement quantitatif")

"self-contained breathing apparatus" means a respirator that has a portable supply of breathing gas that is independent of the ambient atmosphere; ("appareil de protection respiratoire autonome")

"silica" means crystalline silica in a respirable form; ("silice")

"standard method for workplace air sampling and analysis" means a current standard method for measuring a designated substance that is published by,

- (a) ASTM International,
- (b) the Health and Safety Executive (UK),
- (c) the Institut de recherche Robert-Sauvé en santé et en sécurité du travail (Québec),

- (d) the International Organization for Standardization,
- (e) NIOSH,
- (f) the Occupational Safety and Health Administration, United States Department of Labor, or
- (g) the United States Environmental Protection Agency; ("méthode normalisée d'échantillonnage et d'analyse de l'air d'un lieu de travail")

"STEL" or "short-term exposure limit" means the maximum airborne concentration of a biological or chemical agent to which a worker may be exposed,

- (a) in any 15-minute period,
- (b) no more than four times during an eight hour work shift, and
- (c) with at least one hour between exposures; ("LECT", "limite d'exposition à court terme")

"SWPF" or "simulated workplace protection factor" means a surrogate measure of the workplace protection provided by a respirator, as determined in a controlled laboratory setting that simulates a workplace setting; ("FPSMT", "facteur de protection simulé en milieu de travail")

"tight-fitting" means designed to form a complete seal with the user's face or neck; ("hermétique")

"TWA" or "time-weighted average limit" means the time-weighted average airborne concentration of a biological or chemical agent to which a worker may be exposed in a work day or work week. ("LMPT" ou "limite moyenne pondérée dans le temps") O. Reg. 490/09, s. 1; O. Reg. 189/19, s. 1.

Designated substances

2. The following chemical agents are prescribed as designated substances:

1. Acrylonitrile.
2. Arsenic.
3. Asbestos.
4. Benzene.
5. Coke oven emissions.
6. Ethylene oxide.

7. Isocyanates.
8. Lead.
9. Mercury.
10. Silica.
11. Vinyl chloride. O. Reg. 490/09, s. 2.

APPLICATION

Acrylonitrile

3. (1) Subject to subsection (2), this Regulation applies, with respect to acrylonitrile, to every employer and worker at a workplace where acrylonitrile is present, produced, processed, used, handled or stored and at which a worker is likely to be exposed to acrylonitrile. O. Reg. 490/09, s. 3 (1).

(2) With respect to acrylonitrile, this Regulation does not apply to an employer or the workers of an employer at a workplace where acrylonitrile is not produced, processed or used, if a worker's exposure to acrylonitrile results only from the presence, use, handling or storage of goods made in the last stage of a process using polymers made from acrylonitrile. O. Reg. 490/09, s. 3 (2).

Arsenic

4. (1) Subject to subsection (2), this Regulation applies, with respect to arsenic, to every employer and worker at a workplace at which arsenic is produced, processed, used, handled or stored or is a waste product or by-product of a process and at which a worker is likely to be exposed to arsenic. O. Reg. 490/09, s. 4 (1).

(2) With respect to arsenic, this Regulation does not apply to mining operations, including concentrating, milling, washing, crushing, grinding, sifting or conveying of a metallic or non-metallic mineral or mineral-bearing substance or rock, unless the operations are carried on,

- (a) in a plant where smelting, roasting or refining is carried on; or
- (b) in or at a place that is contiguous with a plant where smelting, roasting or refining is carried on. O. Reg. 490/09, s. 4 (2).

Asbestos

- 5.** (1) This Regulation applies, with respect to asbestos, to,

- (a) every employer operating a mine or mining plant for the purpose of mining, crushing, grinding or sifting asbestos and to those workers of such an employer who are likely to be exposed to asbestos;
- (b) every employer processing, adapting or using asbestos in connection with the manufacturing or assembling of goods or products and to those workers of such an employer who are likely to be exposed to asbestos;
- (c) every employer engaged in the activities set out in subsection (2), and to those workers of such an employer who are engaged in those activities and are likely to be exposed to asbestos, if,
 - (i) on or before December 16, 1985, the employer,
 - (A) put into effect and maintained measures and procedures to control the exposure of workers to asbestos, and
 - (B) incorporated the measures and procedures into an asbestos control program in accordance with the regulations, and
 - (ii) the employer has maintained the control program referred to in sub-subclause (i) (B) in accordance with the regulations.

O. Reg. 490/09, s. 5 (1).

(2) The activities mentioned in clause (1) (c) are:

1. The repair, alteration or maintenance of machinery, equipment, aircraft, ships, locomotives, railway cars and vehicles.
2. Work on a building that is necessarily incidental to the repair, alteration or maintenance of machinery or equipment. O. Reg. 490/09, s. 5 (2).

Benzene

6. (1) Subject to subsection (2), this Regulation applies, with respect to benzene, to every employer and worker at a workplace where a worker is likely to be exposed to benzene or a product containing benzene,

- (a) during its transportation or transfer; or
 - (b) during its manufacture, processing, use, handling or storage.
- O. Reg. 490/09, s. 6 (1).

(2) With respect to benzene, this Regulation does not apply to the delivery of gasoline by a gasoline pump into the fuel tank of a motor vehicle, motor boat or other water craft or into a portable container at a service station or other premises. O. Reg. 490/09, s. 6 (2).

Coke oven emissions

7. This Regulation applies, with respect to coke oven emissions, to every employer and worker who works at a metallurgical coke oven and is likely to be exposed to coke oven emissions. O. Reg. 490/09, s. 7.

Ethylene oxide

8. This Regulation applies, with respect to ethylene oxide, to every employer and worker at a workplace where ethylene oxide is present. O. Reg. 490/09, s. 8.

Isocyanates

9. This Regulation applies, with respect to isocyanates, to every employer and worker at a workplace where isocyanates are produced, used, handled or stored and at which a worker is likely to be exposed to isocyanates. O. Reg. 490/09, s. 9.

Lead

10. This Regulation applies, with respect to lead, to every employer and worker at a workplace where lead is present, produced, processed, used, handled or stored and at which a worker is likely to be exposed to lead. O. Reg. 490/09, s. 10.

Mercury

11. (1) Subject to subsection (2), this Regulation applies, with respect to mercury, to every employer and worker at a workplace where mercury is present, produced, processed, used, handled or stored and at which a worker is likely to be exposed to mercury. O. Reg. 490/09, s. 11 (1).

(2) With respect to mercury, this Regulation does not apply to,

(a) an employer,

(i) who is engaged in the practice of dentistry, within the meaning of the *Dentistry Act*, 1991, or

(ii) who has one or more workers who engage in the practice of dentistry, within the meaning of the *Dentistry Act*, 1991;

(b) a worker who works in the office of an employer described in clause (a). O. Reg. 490/09, s. 11 (2).

Silica

12. This Regulation applies, with respect to silica, to every employer and worker at a workplace where silica is present, produced, processed,

used, handled or stored and at which a worker is likely to be exposed to silica. O. Reg. 490/09, s. 12.

Vinyl chloride

13. This Regulation applies, with respect to vinyl chloride, to every employer and worker at a workplace where vinyl chloride is present, produced, processed, used, handled or stored and at which a worker is likely to be exposed to vinyl chloride. O. Reg. 490/09, s. 13.

Exception — construction

14. Despite sections 3 to 13, this Regulation does not apply, at a project, to an employer who engages in construction. O. Reg. 189/19, s. 2.

EMPLOYER DUTIES

Duty to third party workers

15. (1) An employer to whom this Regulation applies with respect to a designated substance shall take every precaution reasonable in the circumstances to ensure the protection of a worker who,

- (a) is not a worker of the employer; and
- (b) is working in the workplace of the employer, is exposed to the designated substance and his or her health is likely to be affected by that exposure. O. Reg. 490/09, s. 15 (1); O. Reg. 189/19, s. 3.

(2) A worker shall comply with the requirements an employer imposes for the protection of the worker in accordance with subsection (1). O. Reg. 490/09, s. 15 (2).

Duty to limit airborne exposure

16. (1) Every employer shall take all necessary measures and procedures by means of engineering controls, work practices and hygiene facilities and practices to ensure that a worker's airborne exposure to each of the following designated substances and forms of designated substances does not exceed the TWA, STEL or C set out for the substance or form of substance in Table 1:

- 1. Benzene.
- 2. Coke oven emissions.
- 3. The forms of lead listed in Table 1.
- 4. The forms of mercury listed in Table 1. O. Reg. 490/09, s. 16 (1).

(2) Every employer shall take all necessary measures and procedures

by means of engineering controls, work practices and hygiene facilities and practices to ensure that a worker's airborne exposure to each of the following designated substances and forms of designated substances is reduced to the lowest practical level and, in any event, does not exceed the TWA, STEL or C set out for the substance or form of substance in Table 1:

1. Acrylonitrile.
2. Arsenic.
3. The forms of asbestos listed in Table 1.
4. Ethylene oxide.
5. The forms of isocyanates listed in Table 1.
6. The forms of silica listed in Table 1.
7. Vinyl chloride. O. Reg. 490/09, s. 16 (2).

(3) Subject to section 18, an employer shall comply with this section without requiring a worker to wear and use a respirator. O. Reg. 490/09, s. 16 (3); O. Reg. 189/19, s. 4 (1).

(4) REVOKED: O. Reg. 189/19, s. 4 (2).

Duty re other isocyanates

17. (1) With respect to isocyanates other than those listed in Table 1, an employer shall,

- (a) adopt and implement all such engineering controls, work practices and hygiene practices as are reasonable and practical; and
- (b) provide a worker who handles, dispenses, mixes, applies, uses, transfers, disposes of, or deals with isocyanates and is likely to inhale isocyanates or come into contact with isocyanates, with appropriate personal protective equipment. O. Reg. 490/09, s. 17 (1).

(2) A worker shall wear and use the personal protective equipment provided by his or her employer when working with isocyanates other than those listed in Table 1. O. Reg. 490/09, s. 17 (2).

When respirator permitted

18. (1) An employer shall provide a worker with a respirator if the employer cannot comply with the strict duty imposed by subsection 16 (1) or (2) because,

- (a) an emergency exists; or

- (b) the measures and procedures necessary to control the exposure of a worker to the airborne designated substance,
 - (i) do not exist or are not available,
 - (ii) are not reasonable or practical for the length of time or frequency of exposure or the nature of the process, operation or work, or
 - (iii) are not effective because of a temporary breakdown of equipment. O. Reg. 490/09, s. 18 (1); O. Reg. 189/19, s. 5 (1).
- (2) A worker who is exposed to any level of an airborne designated substance may request a respirator from his or her employer, and the employer shall provide a respirator in response to the request. O. Reg. 490/09, s. 18 (2); O. Reg. 189/19, s. 5 (2).
- (3) An employer who provides a worker with a respirator shall comply with the requirements of the Respiratory Protection Program set out in sections 26.1 to 26.5. O. Reg. 189/19, s. 5 (3).
- (4) REVOKED: O. Reg. 189/19, s. 5 (3).

ASSESSMENT AND CONTROL PROGRAM

Assessment

- 19.** (1) An employer shall carry out an assessment of the exposure or likelihood of exposure of a worker to a designated substance in the workplace and record it in writing. O. Reg. 490/09, s. 19 (1).
- (2) In carrying out the assessment, the employer shall consider and take into account,
- (a) in the case of acrylonitrile, benzene, ethylene oxide, isocyanates or vinyl chloride, the methods and procedures used or to be used in the production, processing, use, handling and storage of the acrylonitrile, benzene, ethylene oxide, isocyanates or vinyl chloride;
 - (b) in the case of arsenic, lead, mercury or silica, the methods and procedures used or to be used in the processing, use, handling and storage of the arsenic, lead, mercury or silica;
 - (c) in the case of asbestos, the methods and procedures used or to be used in the processing, mining, use, handling and storage of the asbestos;
 - (d) in the case of coke oven emissions, the methods and procedures used or to be used in the metallurgical coking operation;

- (e) the extent and potential extent of a worker's exposure to the designated substance; and
 - (f) the measures and procedures that are necessary to control exposure to the designated substance by means of engineering controls, work practices and hygiene facilities and practices.
- O. Reg. 490/09, s. 19 (2).

(3) The employer shall carry out the assessment in consultation with the joint health and safety committee and the committee may make recommendations respecting the assessment. O. Reg. 490/09, s. 19 (3).

(4) The employer shall provide a copy of the assessment to every member of the joint health and safety committee. O. Reg. 490/09, s. 19 (4).

Control program

20. (1) Subject to section 21, if an assessment discloses or would disclose, if carried out in accordance with section 19, that a worker is likely to be exposed to a designated substance and that the health of a worker may be affected by that exposure, the employer shall,

- (a) develop, establish, put into effect and maintain measures and procedures to control the worker's exposure to the designated substance; and
- (b) incorporate the measures and procedures described in clause (a) into a control program that satisfies the requirements of this section. O. Reg. 490/09, s. 20 (1).

(2) All control programs must provide for the following:

- 1. Engineering controls, work practices and hygiene facilities and practices to control the exposure of a worker to the designated substance.
- 2. Methods and procedures to monitor,
 - i. airborne concentrations of the designated substance in the workplace, and
 - ii. worker exposure to airborne concentrations of the designated substance.
- 3. The personal records described in subsection (6).
- 4. A training program for supervisors and workers on the health effects of the designated substance and the measures and procedures required under the control program. O. Reg. 490/09, s. 20 (2).

(3) In the case of a control program respecting coke oven emissions, the control program must provide for engineering controls, work practices and hygiene facilities and practices set out in Part II of Schedule 1, in addition to those provided for under paragraph 1 of subsection (2). O. Reg. 490/09, s. 20 (3).

(4) In the case of a control program respecting asbestos, benzene, coke oven emissions, isocyanates, lead, mercury or silica, the control program for the substance must provide for pre-placement, periodic, acute exposure and exit medical examinations, as required by the Code for Medical Surveillance, that include,

- (a) a medical history that satisfies the requirements of the Code for Medical Surveillance;
- (b) a physical examination that satisfies the requirements of the Code for Medical Surveillance; and
- (c) clinical tests that are required by the examining physician and satisfy the requirements of the Code for Medical Surveillance. O. Reg. 189/19, s. 6 (1).

(5) The employer shall pay the expenses for the medical examinations and clinical tests described in subsection (4). O. Reg. 490/09, s. 20 (5).

(6) The records mentioned in paragraph 3 of subsection (2) are:

- 1. Personal records, maintained by the employer, of the exposure of a worker to a designated substance at the workplace, which must include,
 - i. an identification of the worker, including the worker's date of birth,
 - ii. the worker's jobs or occupations at the workplace,
 - iii. results of monitoring the worker's exposure to airborne concentrations of the designated substance,
 - iv. the time-weighted average exposure of the worker to the designated substance, and
 - v. the use of a respirator by the worker and its type.
- 2. Personal records, maintained by the employer, of the length of time a worker is taken to be exposed to isocyanates other than those listed in Table 1, which must include the information listed in subparagraphs 1 i, ii and v.
- 3. Personal records, maintained by physicians who have examined

a worker under the control program, or under whose supervision clinical tests have been performed on a worker, of those medical examinations and clinical tests. O. Reg. 490/09, s. 20 (6); O. Reg. 189/19, s. 6 (2).

- (7) An employer shall develop the measures and procedures described in clause (1) (a) and the control program respecting a designated substance in consultation with the joint health and safety committee at the workplace, and the committee may make recommendations respecting them. O. Reg. 490/09, s. 20 (7).
- (8) An employer shall,
 - (a) provide a copy of the control program to every member of the joint health and safety committee;
 - (b) acquaint every worker affected by the control program with its provisions; and
 - (c) make a copy of the control program available to workers both in English and the majority language of the workplace. O. Reg. 490/09, s. 20 (8).

Ethylene oxide, emergency program

21. (1) An employer is not required to develop a control program under section 20 with respect to ethylene oxide for a workplace if,

- (a) ethylene oxide is handled or stored only in closed cylinders and is not otherwise present in the workplace; and
- (b) the assessment discloses or would disclose, if carried out in accordance with section 19,
 - (i) that a worker is likely to be exposed to ethylene oxide only in the case of an accident or leak, and
 - (ii) that the health of the worker may be affected. O. Reg. 490/09, s. 21 (1).

- (2) If subsection (1) applies, the employer shall,
 - (a) develop, establish, put into effect and maintain measures and procedures to protect workers in the event of an accident or leak of ethylene oxide; and
 - (b) incorporate the measures and procedures described in clause (a) into an emergency program that satisfies the requirements of subsection (3). O. Reg. 490/09, s. 21 (2).
- (3) An emergency program respecting ethylene oxide shall include

provisions for,

- (a) identifying, by means of easily visible warning signs, each area where an ethylene oxide cylinder is present;
- (b) an effective evacuation system;
- (c) the location and supply of respirators to be used during an emergency;
- (d) the testing and evaluation, where practical, of the atmosphere to determine the presence or absence of ethylene oxide during and following an emergency; and
- (e) a training program to familiarize supervisors and workers with the health effects of ethylene oxide and the measures and procedures to be taken in case of an emergency. O. Reg. 490/09, s. 21 (3); O. Reg. 189/19, s. 7.

(4) The employer shall develop the measures and procedures described in clause (2) (a) and the emergency program respecting ethylene oxide in consultation with the joint health and safety committee at the workplace, and the committee may make recommendations respecting the measures and procedures or program. O. Reg. 490/09, s. 21 (4).

(5) The employer shall,

- (a) provide a copy of the emergency program to every member of the joint health and safety committee;
- (b) acquaint every worker affected by the emergency program with its provisions; and
- (c) make a copy of the emergency program available to workers both in English and the majority language of the workplace. O. Reg. 490/09, s. 21 (5).

Change requiring further assessment

22. (1) For the purposes of this section, a “change” means,

- (a) a change in a process involving a designated substance or in the methods and procedures in which the substance is produced, mined, processed, used, handled or stored, as the case may be; and
- (b) in the case of coke oven emissions, a change in metallurgical coking operations. O. Reg. 490/09, s. 22 (1).

(2) If there is a change in a workplace that could result in a significant difference in the exposure of a worker to a designated substance, the

employer shall promptly carry out a further assessment of the exposure or likelihood of exposure of a worker to the designated substance. O. Reg. 490/09, s. 22 (2).

(3) Subsections 19 (2), (3) and (4) apply to a further assessment under this section. O. Reg. 490/09, s. 22 (3).

(4) Sections 20 and 21 apply with respect to the results of a further assessment under this section. O. Reg. 490/09, s. 22 (4).

Disputes

23. (1) An employer, a joint health and safety committee or a member of a joint health and safety committee may notify an inspector when a dispute arises between an employer and the joint health and safety committee as to,

- (a) an assessment or further assessment required under section 19 or 22;
- (b) measures and procedures mentioned in clause 20 (1) (a) or 21 (2) (a);
- (c) a control program respecting a designated substance, or any of its provisions required under section 20 or 22; or
- (d) an emergency program for ethylene oxide, or any of its provisions required under section 21 or 22. O. Reg. 490/09, s. 23 (1).

(2) An inspector who receives a notice under subsection (1) shall investigate the dispute and shall give a decision in writing to,

- (a) the employer; and
- (b) the joint health and safety committee. O. Reg. 490/09, s. 23 (2).

(3) Nothing in subsection (2) applies so as to affect the power of an inspector to issue an order for a contravention of this Regulation. O. Reg. 490/09, s. 23 (3).

Measuring airborne concentrations

24. (1) An employer shall ensure that procedures for monitoring, sampling and determining airborne concentrations of a designated substance and worker exposure to airborne concentrations of a designated substance,

- (a) comply with,
 - (i) a standard method for workplace air sampling and analysis or another method recognized in industrial hygiene practice,

and

(ii) the rules set out in Part I of Schedule 1; and

(b) are performed by, or under the direction of, a person who is qualified because of knowledge, training and experience in industrial hygiene practice. O. Reg. 189/19, s. 8.

(2) If a direct-reading instrument is used to determine airborne concentrations of a designated substance, the employer shall ensure that the instrument is used, calibrated and maintained in accordance with the manufacturer's instructions. O. Reg. 189/19, s. 8.

Posting of monitoring results

25. Whenever results become available under a control program that relate to the monitoring of airborne concentrations of a designated substance and worker exposure to airborne concentrations of a designated substance, the employer shall,

- (a) promptly post the results in a conspicuous place or places where they are most likely to come to the attention of workers who would be affected by them and leave them posted for no less than 14 days;
- (b) provide a copy of the results to the joint health and safety committee; and
- (c) keep the results for no less than five years. O. Reg. 490/09, s. 25.

Worker's duty re control program

26. Every worker shall work in compliance with the work practices and hygiene practices in accordance with every control program respecting a designated substance that applies to the workplace. O. Reg. 490/09, s. 26.

RESPIRATORY PROTECTION PROGRAM

Employer duties: respirators

26.1 (1) An employer who provides a worker with a respirator shall ensure that the respirator,

- (a) is appropriate in the circumstances for the form and concentration of airborne designated substance in respect of which the respirator is to be used;
- (b) meets or exceeds the requirements set out in this section and sections 26.2 to 26.5; and

(c) is used by workers in accordance with the requirements of this section and sections 26.2 to 26.5. O. Reg. 189/19, s. 9.

(2) An employer who provides a worker with a respirator shall establish written measures and procedures regarding the selection, care and use of respirators. O. Reg. 189/19, s. 9.

(3) An employer who provides a worker with a respirator shall provide training and instruction to the worker in the care and use of the respirator before the worker first uses the respirator. O. Reg. 189/19, s. 9.

(4) The training and instruction required under subsection (3) shall include training and instruction on the following:

1. Limitations of the respirator.
2. Inspection and maintenance of the respirator, including, in the case of an air-purifying respirator, end of service life indicators or change out schedules for the cartridge, canister or filter.
3. Proper fitting of the respirator.
4. Cleaning and disinfecting the respirator. O. Reg. 189/19, s. 9.

Respirator requirements

26.2 (1) A respirator must meet the following requirements:

1. It must be,
 - i. approved by NIOSH, or
 - ii. approved by a testing and certification agency other than NIOSH and, in the opinion of a person qualified because of knowledge, training and experience in industrial hygiene practice, afford the worker using it protection at least equal to the protection afforded by the use of a respirator approved by NIOSH.
2. It must meet or exceed the applicable assigned protection factor set out in Schedule 2. O. Reg. 189/19, s. 9.

(2) An employer who provides a worker with a respirator shall have regard to the following when selecting the respirator:

1. The airborne concentration of the designated substance to which the worker is exposed, calculated in accordance with Part I of Schedule 1, and the maximum use concentration of the respirator.
2. The manufacturer's information on the intended use, scope and limitations of the respirator.

3. The potential for an atmosphere with an oxygen concentration of less than 19.5 per cent, an IDLH atmosphere, or oil in the atmosphere. O. Reg. 189/19, s. 9.
- (3) If a respirator is used to protect a worker from exposure to asbestos, it must be,
 - (a) equipped with a HEPA filter; or
 - (b) equipped with a N-100, R-100 or P-100 particulate filter. O. Reg. 189/19, s. 9.
- (4) If an airline respirator is used in an IDLH atmosphere, it must be fitted with an auxiliary supply of breathing air that is sufficient to permit the worker to escape unassisted from the atmosphere. O. Reg. 189/19, s. 9.
- (5) If a respirator is supplied with breathing air from an air cylinder or a compressed breathing air system, the following requirements must be met:
 1. The breathing air must meet the purity requirements set out in Table 1 of CSA Standard CAN/CSA-Z180.1-13 (R2018), Compressed Breathing Air and Systems (2018).
 2. If a compressed breathing air system uses a compressor with an operating pressure greater than 103.4 kPa to supply the breathing air, the breathing air must be tested at least once every six months to ensure that it meets the requirement set out in paragraph 1.
 3. The air intake used in connection with a compressed breathing air system must,
 - i. for breathing air delivered by a compressor with an operating pressure greater than 103.4 kPa, be located in accordance with section 6 (Air intakes) and Annex A of CSA Standard CAN/CSA-Z180.1-13 (R2018), Compressed Breathing Air and Systems (2018), and
 - ii. for breathing air delivered by an ambient air system, be located in accordance with section 6 (Air intakes) and Annex B of CSA Standard CAN/CSA-Z180.1-13 (R2018), Compressed Breathing Air and Systems (2018).
 4. If a compressed breathing air system uses an oil-lubricated compressor to supply the breathing air,
 - i. a continuous carbon monoxide monitor equipped with audible and visual alarms that activate at 5 ppm must be

provided, and

- ii. the continuous carbon monoxide monitor must be calibrated in accordance with the manufacturer's instructions. O. Reg. 189/19, s. 9.

Requirements: use of respirator

26.3 (1) A respirator shall be used in accordance with the manufacturer's instructions. O. Reg. 189/19, s. 9.

(2) A worker shall not be assigned to an operation that requires the use of a respirator unless the worker is physically able to perform the operation while using the respirator. O. Reg. 189/19, s. 9.

Requirements: tight-fitting respirator

26.4 (1) A respirator that is designed to be tight-fitting shall be tested for fit in accordance with one of the following:

1. A qualitative fit test.
2. A quantitative fit test. O. Reg. 189/19, s. 9.

(2) A worker shall conduct positive and negative pressure user seal checks prior to every use of a tight-fitting elastomeric respirator. O. Reg. 189/19, s. 9.

(3) A respirator that is designed to be tight-fitting shall not be provided to, or used by, a worker with facial hair that comes between the sealing surface of the facepiece and the face or that interferes with the functioning of the respirator. O. Reg. 189/19, s. 9.

Requirements: care and maintenance of respirator

26.5 A respirator shall be cared for and maintained in accordance with the manufacturer's instructions. O. Reg. 189/19, s. 9.

MEDICAL EXAMINATIONS AND CLINICAL TESTS

Physician to receive records

27. (1) The employer shall provide a copy of a worker's personal exposure record to a physician who examines the worker or supervises clinical tests on a worker,

- (a) in accordance with a control program to which subsection 20 (4) applies respecting a designated substance to which the worker may be or has been exposed; or
- (b) under section 28, where the worker has been exposed to

acrylonitrile, arsenic, ethylene oxide or vinyl chloride. O. Reg. 490/09, s. 27 (1); O. Reg. 189/19, s. 10.

(2) If subsection (1) requires an employer to provide a physician with a copy of a worker's personal exposure record, the worker may request the physician to provide the worker or the worker's physician with a copy of,

- (a) the worker's personal exposure record;
- (b) the results of the examination or clinical test. O. Reg. 490/09, s. 27 (2).

(3) In the case of a deceased worker, subsection (2) applies, with necessary modifications, to the next of kin or personal representative of the worker. O. Reg. 490/09, s. 27 (3).

(4) A physician who receives a request under subsection (2) or (3) shall comply with the request. O. Reg. 490/09, s. 27 (4).

Medical examination after exposure to acrylonitrile, arsenic, ethylene oxide or vinyl chloride

28. (1) A worker who has been exposed to acrylonitrile, arsenic, ethylene oxide or vinyl chloride shall, if he or she agrees, undergo a medical examination and any clinical tests, if,

- (a) the worker or the worker's physician has reason to believe that the worker's health may be affected by the exposure and the worker or physician has so notified the employer in writing; or
- (b) the employer has reason to believe that the worker's health may be affected by the exposure and the employer has so notified the worker in writing. O. Reg. 490/09, s. 28 (1); O. Reg. 189/19, s. 11 (1).

(2) The employer shall pay the expenses of the medical examination and clinical tests. O. Reg. 490/09, s. 28 (2).

(3) The purpose of the medical examination and clinical tests is to determine whether the worker has an occupational illness because of the exposure to acrylonitrile, arsenic, ethylene oxide or vinyl chloride and whether the worker is fit, fit with limitations or unfit to continue working in exposure to acrylonitrile, arsenic, ethylene oxide or vinyl chloride. O. Reg. 490/09, s. 28 (3); O. Reg. 189/19, s. 11 (2).

Results of examinations and tests

29. (1) This section applies when a physician conducts a medical examination of a worker or supervises clinical tests of a worker,

- (a) in accordance with a control program to which subsection 20 (4) applies respecting a designated substance to which the worker may be or has been exposed; or
- (b) under section 28, where the worker has been exposed to acrylonitrile, arsenic, ethylene oxide or vinyl chloride. O. Reg. 490/09, s. 29 (1); O. Reg. 189/19, s. 12 (1).

(2) The physician who conducts the medical examination or supervises the clinical tests shall advise the worker and the worker's employer whether the worker has an occupational illness because of exposure to a designated substance and whether the worker is fit, fit with limitations or unfit to continue working in exposure to the designated substance. O. Reg. 490/09, s. 29 (2).

(3) In advising the worker and the worker's employer that the worker is fit with limitations or unfit to continue working in exposure to a designated substance, the physician shall,

- (a) be governed by the Code for Medical Surveillance; and
- (b) provide the advice without giving or disclosing to the employer the records or results of the examination or tests. O. Reg. 490/09, s. 29 (3); O. Reg. 189/19, s. 12 (2).

(4) The worker's employer shall act in accordance with the advice provided by a physician under subsection (2). O. Reg. 490/09, s. 29 (4).

(5) If a worker is removed from working in exposure to a designated substance because a medical examination or clinical test discloses that the worker has or may have a condition resulting from exposure to the substance and the worker suffers a loss of earnings occasioned thereby, the worker is entitled to compensation for the loss in the manner and to the extent provided by the *Workplace Safety and Insurance Act*, 1997. O. Reg. 490/09, s. 29 (5).

(6) On advising the worker and the worker's employer that the worker is fit with limitations or unfit to continue working in exposure to a designated substance, the physician shall also advise the joint health and safety committee, in writing and on a confidential basis, and in giving the advice shall indicate his or her opinion as to the interpretation to be placed on the advice. O. Reg. 490/09, s. 29 (6).

(7) On advising the worker and the worker's employer that a worker is fit with limitations or unfit to continue working in exposure to a designated substance, the physician shall promptly communicate that advice to the Provincial Physician. O. Reg. 490/09, s. 29 (7).

Retention: personal exposure records

30. (1) A physician who is provided with a copy of a worker's personal exposure record under clause 27 (1) (a) shall keep the copy in a secure place until the later of the following dates:

1. The 40th anniversary of the date the first record was created in the personal exposure record.
2. The 20th anniversary of the date the last record was added to the personal exposure record. O. Reg. 490/09, s. 30 (1).

(2) If the physician is no longer able to keep the copy of the personal exposure record, he or she shall forward it to the Provincial Physician or to a physician designated by the Provincial Physician, who shall keep the copy until the later of the dates specified in subsection (1). O. Reg. 490/09, s. 30 (2); O. Reg. 148/12, s. 1.

(3) If a physician is not required by subsection (1) to keep a copy of a worker's personal exposure record, the employer shall keep the record in a secure place until the later of the dates specified in subsection (1). O. Reg. 490/09, s. 30 (3).

(4) If the employer is unable to keep the personal exposure record, the employer shall forward it to the Provincial Physician, who shall keep it until the later of the dates specified in subsection (1). O. Reg. 490/09, s. 30 (4).

Retention: records of medical examinations

31. (1) A physician who conducted medical examinations of a worker or supervised clinical tests of a worker shall, if section 29 applies, keep the records of the examinations and tests in a secure place until the later of the following dates:

1. The 40th anniversary of the date the first record was made.
2. The 20th anniversary of the date the last record was made. O. Reg. 490/09, s. 31 (1).

(2) If the physician is no longer able to keep the records of the medical examinations and clinical tests, he or she shall forward them to the Provincial Physician or to a physician designated by the Provincial Physician, who shall keep the records until the later of the dates specified in subsection (1). O. Reg. 490/09, s. 31 (2); O. Reg. 148/12, s. 2.

VARIANCE FROM A CODE

Variance from a code

32. REVOKED: O. Reg. 189/19, s. 13.

33. OMITTED (REVOKES OTHER REGULATIONS). O. Reg. 490/09, s. 33.

34. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 490/09, s. 34.

TABLE / TABLEAU 1
EXPOSURE LIMITS / LIMITES D'EXPOSITION

Agent / Agent [CAS No. / numéro CAS]	Time-Weighted Average Limit (TWA), Short-Term Exposure Limit (STEL), Ceiling Limit (C) and Notations / Limite moyenne pondérée dans le temps (LMPT), limite d'exposition à court terme (LECT), valeur plafond (C) et notations		
	TWA / LMPT	STEL / C LECT / C	Notations / Notations
Acrylonitrile / Acrylonitrile [107-13-1]	2 ppm	C 10 ppm	Skin / Peau
Arsenic, elemental arsenic and inorganic compounds [7440-38-2], and organic compounds (only where both inorganic and organic compounds are present), as As. / Arsenic, arsenic élémentaire et composés inorganiques [7440-38-2], et composés organiques (seulement lorsque les composés inorganiques et organiques sont tous les deux présents), en As	0.01 mg/m ³	0.05 mg/m ³	

Asbestos – All forms / Amiante – Toutes les formes [1332-21-4]	0.1 f/cc (F)		
Actinolite / Actinolite [77536-66-4]	0.1 f/cc (F)		
Amosite / Amosite [12172-73-5]	0.1 f/cc (F)		
Anthophyllite / Anthophyllite [77536-67-5]	0.1 f/cc (F)		
Chrysotile / Chrysotile [132207- 32-0]	0.1 f/cc (F)		
Crocidolite / Crocidolite [12001- 28-4]	0.1 f/cc (F)		
Tremolite / Trémolite [77536-68-6]	0.1 f/cc (F)		
Benzene / Benzène [71-43-2]	0.5 ppm	2.5 ppm	Skin / Peau
Coke Oven Emissions1 / Fumées de four à coke1	0.15 mg/ m3		
Ethylene oxide / Oxyde d'éthylène [75-21-8]	1 ppm 1.8 mg/ m3	10 ppm 18 mg/ m3	
Isocyanates, organic compounds / Isocyanates, composés organiques			
Toluene diisocyanate (TDI) / Diisocyanate de toluène (TDI) [584- 84-9] [91-08-7]	0.005 ppm	C 0.02 ppm	
Methylene bisphenyl isocyanate (MDI) / Diisocyanate-4,4' de diphénylméthane (MDI) [101-68-8]	0.005 ppm	C 0.02 ppm	
Hexamethylene diisocyanate (HDI) / Diisocyanate d'hexaméthylène (HDI) [822-06-0]	0.005 ppm	C 0.02 ppm	
Isophorone diisocyanate (IPDI) / Diisocyanate d'isophorone (IPDI) [4098-71-9]	0.005 ppm	C 0.02 ppm	
Methylene bis (4-cyclohexylisocyanate) / Diisocyanate-4,4' de dicyclohexylméthane [5124-30-1]	0.005 ppm	C 0.02 ppm	
Methyl Isocyanate / Isocyanate de méthyle [624-83-9]	0.02 ppm	0.06 ppm	Skin / Peau
Ethyl isocyanate/ Isocyanate d'éthyle [109-90-0]	0.02 ppm	0.06 ppm	Skin / Peau
Phenyl isocyanate / Isocyanate de phényle [103-71-9]	0.005 ppm	0.015 ppm	Skin / Peau

Lead [7439-92-1], elemental lead, inorganic and organic compounds of lead, as Pb / Plomb [7439-92-1], plomb élémentaire, composés inorganiques et organiques du plomb, en Pb Elemental lead, inorganic and organic compounds of lead, as Pb except tetraethyl lead / Plomb élémentaire, composés inorganiques et organiques du plomb, en Pb, sauf le plomb tétraéthyle [78-00-2]	0.05 mg/m ³		Skin (organic compounds)/ Peau (composés organiques)
Tetraethyl lead, as Pb / Plomb tétraéthyle, en Pb [78-00-2]	0.10 mg/m ³	0.30 mg/m ³	
Mercury [7439-97-6], elemental mercury, inorganic and organic compounds of mercury, as Hg / Mercure [7439-97-6], mercure élémentaire, composés inorganiques et organiques du mercure, en Hg All forms of except alkyl, as Hg / Toutes les formes de mercure, sauf les composés alkylés, en Hg Alkyl compounds of, as Hg / Composés alkylés du mercure, en Hg	0.025 mg/m ³ 0.01 mg/m ³	 0.03 mg/m ³	Skin / Peau Skin / Peau
Silica, Crystalline / Silice cristalline Quartz / Tripoli / Quartz ou tripoli [14808-60-7; 1317-95-9] Cristobalite / Cristobalite [14464-46-1]	0.10 mg/m ³ (R) 0.05 mg/m ³ (R)		
Vinyl chloride / Chlorure de vinyle [75-01-04]	1 ppm		

Endnotes and Abbreviations:	Notes et abréviations :
¹ Means the benzene soluble fraction of total particulate matter of the substances emitted into the atmosphere from metallurgical coke ovens including condensed vapours and solid particulates.	¹ Fraction soluble dans le benzène de la matière particulaire totale des substances rejetées dans l'atmosphère par les fours à coke métallurgique, y compris les vapeurs condensées et les particules solides.
[CAS No.] - CAS Registry Number.	[numéro CAS] - numéro de registre CAS.
f/cc - Fibres per cubic centimetre of air.	f/cc - Fibres par centimètre cube d'air.
mg/m ³ - Milligrams of the agent per cubic metre of air.	mg/m ³ - Milligrammes par mètre cube d'air.
ppm - Parts of the agent per million parts of air by volume.	ppm - Parties par million de parties d' air par volume.
Skin - Danger of cutaneous absorption.	Peau - Danger d'absorption cutanée.
(F) Respirable fibres: length > 5 µm; aspect ratio ≥3:1, as determined by the membrane filter method at 400-450 times magnification (4-mm objective), using phase-contrast illumination.	(F) Fibres respirables : longueur supérieure à 5 µm; rapport longueur-diamètre supérieur ou égal à 3:1, déterminé par la méthode de filtration par membrane à un grossissement de 400 à 450 fois la grandeur réelle (objectif de 4 mm), en utilisant un éclairage par contraste de phase.
(R) Respirable fraction: means that size fraction of the airborne particulate deposited in the gas-exchange region of the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the ACGIH particle size-selective sampling criteria for airborne particulate matter; and (b) has the cut point of 4 µm at 50 per cent collection efficiency.	(R) Fraction respirable : la tranche granulométrique des particules en suspension dans l'air qui sont déposées dans la zone d'échange de gaz des voies respiratoires et recueillies lors d'un échantillonnage de l'air à l'aide d'un appareil de sélection granulométrique qui : a) satisfait aux critères de sélection granulométrique établis par l'ACGIH; b) a un point de coupure à 4 µm à 50 pour cent d'efficacité.

SCHEDULE 1

PART I

AIRBORNE MEASUREMENT AND CALCULATION OF EXPOSURE

1. Airborne concentrations of a designated substance are expressed as,

- (a) parts of the agent per million parts of air by volume (ppm);
- (b) milligrams of the agent per cubic metre of air (mg/m³); or
- (c) fibres per cubic centimetre of air (f/cc).

2. In determining exposure to airborne concentrations of the designated substance, no regard shall be had to the wearing or use of respirators.

3. Air sampling of the airborne concentrations of the designated substance is not required for the full period of a work day or a work week if the air sampling is representative of airborne concentrations of the substance likely to be present during the full period.

4. The average concentrations of a designated substance to which a worker is exposed shall be determined from analysis of air samples taken as being representative of the exposure of the worker to the designated substance during work operations.

5. Subject to section 6 of this Schedule, the time-weighted average exposure to an airborne designated substance in a work day or work week shall be calculated as follows:

1. The cumulative daily or weekly exposure shall be calculated using the following formula:

$$C_1T_1 + C_2T_2 + \dots + C_nT_n$$

where,

C_1 is the concentration found in an air sample, and

T_1 is the total time in hours to which the worker is taken to be exposed to concentration C_1 in a work day or a work week.

2. The time-weighted average exposure shall be calculated by dividing the cumulative daily exposure by eight and the cumulative weekly exposure by 40 respectively.

6. A determination of time-weighted average exposure for extended work shifts may be calculated using the methodology set out in the Guide for the Adjustment of Permissible Exposure Values for Unusual Work Schedules (March 2015), published by *Quebec's Institut de recherche*

Robert-Sauvé en santé et en sécurité du travail (IRSST), using the applicable TWA set out in Table 1 of this Regulation.

7. Short-term exposures to the designated substance in any 15-minute period are determined from a single sample or from a time-weighted average of sequential samples taken during that period.

O. Reg. 189/19, s. 14.

PART II COKE OVEN EMISSIONS CONTROL PROGRAM – ADDITIONAL ELEMENTS

A. ENGINEERING CONTROLS

1. Charging

1. The charging operation shall be conducted in one of the following ways:

1. Stage charging.
2. Sequential charging.
3. Pipeline charging of preheated coal.
4. Chain conveyor charging of preheated coal.

2. During the charging operation, provision shall be made for the following engineering controls:

1. Drafting from two or more points of the oven chamber by,
 - i. a double collecting main,
 - ii. a jumper pipe on the larry car or oven top, or
 - iii. a separate charging main attached to the larry car.
2. A functional steam aspiration system.
3. Adjustable volumetric controls on the larry car hoppers to provide the appropriate quantity of coal to be charged so as to ensure an adequate free space for gas evacuation.
4. Stainless steel hopper liners, mechanical vibrators or pneumatic stimulators to allow the proper flow of coal into the oven chamber.
5. Gooseneck and standpipe cleaners as is appropriate in the circumstances.
6. A leveller bar seal to the chuck door opening.

7. Carbon cutter or compressed air roof decarbonization on the pusher ram.

2. Coking

1. During the coking operation, provision shall be made for the following engineering controls:

1. Backpressure control on each battery to ensure uniform collector main pressure.
2. An adequate number of spare doors readily available and in good condition for the replacement of leaking doors when such replacement is appropriate in the circumstances.
3. Chuck door gaskets or sealing material to be used when such use is appropriate in the circumstances.

B. WORK PRACTICES

1. Charging

1. During the charging operation, provision shall be made for the following work practices:

1. Inspection and cleaning of goosenecks and standpipes prior to each charge to provide an appropriate open area for the passage of gases from the oven to the collecting main.
2. Inspection and, when appropriate in the circumstances, the removal of roof carbon so as to ensure an adequate free space above the coal charge to allow for the passage of gases to the off-take system.
3. Routine inspection of the steam aspiration system.
4. Routine inspection of the flushing liquor sprays.
5. Cleaning and sealing of standpipe caps as is appropriate in the circumstances.
6. Filling of the larry car hoppers with an appropriate quantity of coal.
7. Alignment of the larry car at the oven so that the drop sleeves fit tightly over the charging holes.
8. Charging of the coal into the oven using the proper sequence for the type of charging operation utilized.
9. The aspiration system to be turned off only when the charging holes have been closed.

2. Coking

1. During the coking operation, provision shall be made for the following work practices:

1. Repair, replacement or adjustment of oven doors and chuck doors, as well as maintenance of door jambs, as is appropriate in the circumstances, to provide a gas tight fit.
2. Clean oven doors, chuck doors and door jambs between each coking cycle to provide a gas tight fit.
3. An inspection system and a corrective action program to control door and top side emissions.

3. Pushing

1. During the pushing operation, provision shall be made for the following work practices:

1. Coke spillage to be cleaned up after each push.
2. Coal spillage on the bench to be collected in the bin on the pusher machine.
3. Coal charge to be heated as uniformly as possible for the set time period before pushing.
4. Heating maintenance to be performed to provide heating which is as uniform as possible.

4. Maintenance and Repair

1. In order to ensure adequate maintenance and repair, provision shall be made for the following work practices:

1. Regular inspection of all engineering controls which have been installed to decrease coke oven emissions and effective implementation of all necessary repairs thereto.
2. Regular inspection of battery function and prompt and effective implementation of necessary repairs thereto.

C. HYGIENE FACILITIES

1. Provision shall be made for the following hygiene facilities:

1. Positive pressure, temperature controlled, filtered air for the larry car, pusher machine, door machine and quench car cabs.
2. Positive pressure, temperature controlled, filtered air rest areas for

workers.

O. Reg. 490/09, Sched. 1.

SCHEDULE 2
ASSIGNED PROTECTION FACTOR FOR RESPIRATORS

Type of Respirator	Assigned Protection Factor
Air-Purifying Respirator – filtering-facepiece	10
Air-Purifying Respirator – half-facepiece	10
Air- Purifying Respirator – full-facepiece	50
Powered Air-Purifying Respirator – half-facepiece	50
Powered Air-Purifying Respirator – full-facepiece	25
Powered Air-Purifying Respirator – helmet/hood	25 1,000 if supported by an SWPF study
Powered Air-Purifying Respirator – loose-fitting facepiece/visor	25
Airline Respirator – continuous- flow half-facepiece	50
Airline Respirator – continuous- flow full-facepiece	1,000
Airline Respirator – continuous-flow helmet/hood	25 1,000 if supported by an SWPF study
Airline Respirator – continuous-flow loose-fitting facepiece/visor	25
Airline Respirator – pressure-demand half-facepiece	50
Airline Respirator – pressure-demand full-facepiece	1,000
Self-Contained Breathing Apparatus (SCBA) – pressure-demand full-facepiece	10,000
Multi-functional SCBA/Airline Respirator	10,000

O. Reg. 189/19, s. 15.

ONTARIO REGULATION 278/05

DESIGNATED SUBSTANCE — ASBESTOS ON CONSTRUCTION PROJECTS AND IN BUILDINGS AND REPAIR OPERATIONS

Consolidation Period: From January 1, 2020 to the e-Laws currency date.

Last amendment: 450/19.

This is the English version of a bilingual regulation.

Definitions

1. (1) In this Regulation,

"asbestos" means any of the fibrous silicates listed in subsection (2);
("amiante")

"asbestos-containing material" means material that contains 0.5 per cent or more asbestos by dry weight; ("matériau contenant de l'amiante")

"building" means any structure, vault, chamber or tunnel including, without limitation, the electrical, plumbing, heating and air handling equipment (including rigid duct work) of the structure, vault, chamber or tunnel; ("édifice")

"competent worker", in relation to specific work, means a worker who,

- (a) is qualified because of knowledge, training and experience to perform the work,
- (b) is familiar with the Act and with the provisions of the regulations that apply to the work, and
- (c) has knowledge of all potential or actual danger to health or safety in the work; ("travailleur compétent")

"demolition" includes dismantling and breaking up; ("démolition")

"examine", when used with reference to material, means to carry out procedures in accordance with section 3 to establish its asbestos content and to establish the type of asbestos, and "examination" has a corresponding meaning; ("examiner")

"friable material" means material that,

- (a) when dry, can be crumbled, pulverized or powdered by hand pressure, or

(b) is crumbled, pulverized or powdered; (“matériau friable”)

“HEPA filter” means a high efficiency particulate aerosol filter that is at least 99.97 per cent efficient in collecting a 0.3 micrometre aerosol; (“filtre HEPA”)

“homogeneous material” means material that is uniform in colour and texture; (“matériau homogène”)

“joint health and safety committee” means,

- (a) a joint health and safety committee established under section 9 of the Act,
- (b) a similar committee described in subsection 9 (4) of the Act, or
- (c) the workers or their representatives who participate in an arrangement, program or system described in subsection 9 (4) of the Act; (“comité mixte sur la santé et la sécurité”)

“occupier” has the same meaning as in the *Occupiers’ Liability Act*; (“occupant”)

“Type 1 operation” means an operation described in subsection 12 (2); (“opération de type 1”)

“Type 2 operation” means an operation described in subsection 12 (3); (“opération de type 2”)

“Type 3 operation” means an operation described in subsection 12 (4). (“opération de type 3”) O. Reg. 278/05, s. 1 (1).

(2) The fibrous silicates referred to in the definition of “asbestos” in subsection (1) are:

- 1. Actinolite.
- 2. Amosite.
- 3. Anthophyllite.
- 4. Chrysotile.
- 5. Crocidolite.
- 6. Tremolite. O. Reg. 278/05, s. 1 (2).

Application

2. (1) This Regulation applies to,

- (a) every project, its owner, and every constructor, employer and worker engaged in or on the project;

- (b) the repair, alteration or maintenance of a building, the owner of the building, and every employer and worker engaged in the repair, alteration or maintenance;
- (c) every building in which material that may be asbestos-containing material has been used, and the owner of the building;
- (d) the demolition of machinery, equipment, aircraft, ships, locomotives, railway cars and vehicles, and every employer and worker engaged in the demolition; and
- (e) subject to subsection (3),
 - (i) work described in subsection (2) in which asbestos-containing material is likely to be handled, dealt with, disturbed or removed, and
 - (ii) every employer and worker engaged in the work. O. Reg. 278/05, s. 2 (1).
- (2) Clause (1) (e) applies to,
 - (a) the repair, alteration or maintenance of machinery, equipment, aircraft, ships, locomotives, railway cars and vehicles; and
 - (b) work on a building that is necessarily incidental to the repair, alteration or maintenance of machinery or equipment. O. Reg. 278/05, s. 2 (2).
- (3) This Regulation does not apply to an employer in respect of those workers who are employed by the employer and engaged in the activities described in clause (1) (e) if, pursuant to clause 5 (1) (c) of Ontario Regulation 490/09 (Designated Substances) made under the Act, that regulation applies to the employer and those workers with respect to asbestos. O. Reg. 493/09, s. 1.
- (4) This Regulation does not apply to an owner of a private residence occupied by the owner or the owner's family or to an owner of a residential building that contains not more than four dwelling units, one of which is occupied by the registered owner or family of the registered owner. O. Reg. 278/05, s. 2 (4).
- (5) This Regulation does not apply to workers and their employers when the workers are engaged in the following work under the authority of the *Fire Protection and Prevention Act, 1997*:
 - 1. Fire suppression.
 - 2. Rescue and emergency services.

3. The investigation of the cause, origin and circumstances of a fire or explosion or condition that might have caused a fire, explosion, loss of life or damage to property. O. Reg. 479/10, s. 1.

(6) While the work described in subsection (5) is being performed at a workplace, this Regulation does not apply to that workplace in respect of the workers engaged in the work and their employers, and Regulation 833 of the Revised Regulations of Ontario, 1990 (Control of Exposure to Biological or Chemical Agents) made under the Act applies. O. Reg. 479/10, s. 1.

Adoption of standard

3. (1) For the purposes of this Regulation, the method and procedures for establishing whether material is asbestos-containing material and for establishing its asbestos content and the type of asbestos shall be in accordance with the following standard:

1. U.S. Environmental Protection Agency. Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials. June 1993. O. Reg. 278/05, s. 3 (1).

(2) The procedures required by subsection (1) shall be carried out on bulk material samples that are randomly collected by a competent worker and are representative of each area of homogeneous material. O. Reg. 278/05, s. 3 (2).

(3) The minimum number of bulk material samples to be collected from an area of homogeneous material is set out in Table 1. O. Reg. 278/05, s. 3 (3).

(4) If analysis establishes that a bulk material sample contains 0.5 per cent or more asbestos by dry weight,

- (a) it is not necessary to analyze other bulk material samples taken from the same area of homogeneous material; and
- (b) the entire area of homogeneous material from which the bulk material sample was taken is deemed to be asbestos-containing material. O. Reg. 278/05, s. 3 (4).

Restrictions re sprayed material, insulation, sealants

4. (1) No person shall apply or install or cause to be applied or installed, by spraying, material containing 0.1 per cent or more asbestos by dry weight that can become friable. O. Reg. 278/05, s. 4 (1).

(2) No person shall apply or install or cause to be applied or installed, as thermal insulation, material containing 0.1 per cent or more asbestos

by dry weight that can become friable. O. Reg. 278/05, s. 4 (2).

(3) A liquid sealant shall not be applied to friable asbestos-containing material if,

- (a) the material has visibly deteriorated; or
- (b) the material's strength and its adhesion to the underlying materials and surfaces are insufficient to support its weight and the weight of the sealant. O. Reg. 278/05, s. 4 (3).

Information for workers

5. (1) This section applies whenever a worker is to do work that,

- (a) involves material that,
 - (i) is asbestos-containing material,
 - (ii) is being treated as if it were asbestos-containing material,
 - (iii) is the subject of advice under section 9 or a notice under subsection 10 (8); or
- (b) is to be carried on in close proximity to material described in clause (a) and may disturb it. O. Reg. 278/05, s. 5 (1).

(2) The constructor or employer shall advise the worker and provide him or her with the following information:

- 1. The location of all material described in clause (1) (a).
- 2. For each location, whether the material is friable or non-friable.
- 3. In the case of sprayed-on friable material, for each location,
 - i. if the material is known to be asbestos-containing material, the type of asbestos, if known, or
 - ii. in any other case, a statement that the material will be treated as though it contained a type of asbestos other than chrysotile. O. Reg. 278/05, s. 5 (2).

Demolition

6. (1) The demolition of all or part of machinery, equipment, a building, aircraft, locomotive, railway car, vehicle or ship shall be carried out or continued only when any asbestos-containing material that may be disturbed during the work has been removed to the extent practicable. O. Reg. 278/05, s. 6 (1).

(2) Subsection (1) does not apply so as to prevent work necessary to

gain access to the asbestos-containing material that is to be removed, if the workers doing the work are protected from the hazard. O. Reg. 278/05, s. 6 (2).

7. REVOKED: O. Reg. 422/10, s. 1.

Ongoing asbestos management in buildings

8. (1) REVOKED: O. Reg. 62/18, s. 1.

(2) Subsection (3) applies if,

- (a) the owner of a building treats material that has been used in the building for any purpose related to it, including insulation, fireproofing and ceiling tiles, as if it were asbestos-containing material;
 - (b) the owner of a building has been advised under section 9 of the discovery of material that may be asbestos-containing material;
 - (c) the owner of a building knows or ought reasonably to know that asbestos-containing material has been used in a building for any purpose related to the building, including insulation, fireproofing and ceiling tiles;
 - (d) an examination under subsection (8) or section 10 establishes, or would have established if carried out as required, that asbestos-containing material has been used in a building for any purpose related to the building, including insulation, fireproofing and ceiling tiles; or
 - (e) a constructor or employer advises the owner of a building, in accordance with subsection 10 (8), of the discovery of material that may be asbestos-containing material and that was not referred to in a report prepared under subsection 10 (4). O. Reg. 278/05, s. 8 (2).
- (3) If this subsection applies, the owner shall,
- (a) prepare and keep on the premises a record containing the information set out in subsection (4);
 - (b) give any other person who is an occupier of the building written notice of any information in the record that relates to the area occupied by the person;
 - (c) give any employer with whom the owner arranges or contracts for work that is not described in clause 10 (1) (a) written notice of the information in the record, if the work,

- (i) may involve material mentioned in the record, or
 - (ii) may be carried on in close proximity to such material and may disturb it;
- (d) advise the workers employed by the owner who work in the building of the information in the record, if the workers may do work that,
- (i) involves material mentioned in the record, or
 - (ii) is to be carried on in close proximity to such material and may disturb it;
- (e) establish and maintain, for the training and instruction of every worker employed by the owner who works in the building and may do work described in clause (d), a program dealing with,
- (i) the hazards of asbestos exposure,
 - (ii) the use, care and disposal of protective equipment and clothing to be used and worn when doing the work,
 - (iii) personal hygiene to be observed when doing the work, and
 - (iv) the measures and procedures prescribed by this Regulation;
- and
- (f) inspect the material mentioned in the record at reasonable intervals in order to determine its condition. O. Reg. 278/05, s. 8 (3).
- (4) The record shall contain the following information:
1. The location of all material described in clauses (2) (a), (b), (c), (d) and (e).
 2. For each location, whether the material is friable or non-friable.
 3. In the case of friable sprayed-on material, for each location,
 - i. if the material is known to be asbestos-containing material, the type of asbestos, if known, or
 - ii. in any other case, a statement that the material will be treated as though it contained a type of asbestos other than chrysotile. O. Reg. 278/05, s. 8 (4).
- (5) The owner shall update the record described in clause (3) (a),
- (a) at least once in each 12-month period; and
 - (b) whenever the owner becomes aware of new information relating

to the matters the record deals with. O. Reg. 278/05, s. 8 (5).

(6) If updating under subsection (5) results in any change to the record, clauses (3) (b), (c) and (d) apply with necessary modifications. O. Reg. 278/05, s. 8 (6).

(7) An occupier who receives a notice under clause (3) (b) is responsible for performing the duties set out in clauses (3) (d) and (e) with respect to the occupier's own workers. O. Reg. 278/05, s. 8 (7).

(8) If it is readily apparent that friable material used in a building as fireproofing or acoustical or thermal insulation has fallen and is being disturbed so that exposure to the material is likely to occur,

- (a) the owner shall cause the material to be examined to establish whether it is asbestos-containing material; and
- (b) until it has been established whether the material is asbestos-containing material, no further work involving the material shall be done. O. Reg. 278/05, s. 8 (8).

(9) Subsection (8) does not apply if the work is carried out in accordance with this Regulation as though the material were asbestos-containing material and, in the case of friable sprayed-on material, as though it contained a type of asbestos other than chrysotile. O. Reg. 278/05, s. 8 (9).

(10) If the examination mentioned in subsection (8) establishes that the material is asbestos-containing material, or if the material is treated as though it were asbestos-containing material as described in subsection (9),

- (a) the owner shall cause the fallen material to be cleaned up and removed; and
- (b) if it is readily apparent that material will continue to fall because of the deterioration of the fireproofing or insulation, the owner shall repair, seal, remove or permanently enclose the fireproofing or insulation. O. Reg. 278/05, s. 8 (10).

(11) Subsection (10) does not apply if the fallen material is confined to an area that is,

- (a) above a closed false ceiling; and
- (b) not part of a return air plenum. O. Reg. 278/05, s. 8 (11).

Responsibility of employer other than owner

9. An employer whose workers work in a building of which the employer

is not the owner shall advise the owner if the workers discover material that may be asbestos-containing material in the building. O. Reg. 278/05, s. 9.

Owner's responsibilities before requesting tender or arranging work

10. (1) An owner shall comply with subsections (2), (3), (4), (5) and (6) before,

- (a) requesting tenders for the demolition, alteration or repair of all or part of machinery, equipment, or a building, aircraft, locomotive, railway car, vehicle or ship; or
- (b) arranging or contracting for any work described in clause (a), if no tenders are requested. O. Reg. 278/05, s. 10 (1).

(2) Unless clause (3) (a) or (b) applies, the owner shall have an examination carried out in accordance with section 3 to establish whether any material that is likely to be handled, dealt with, disturbed or removed, whether friable or non-friable, is asbestos-containing material. O. Reg. 278/05, s. 10 (2).

(3) An examination under subsection (2) is not required if,

- (a) the owner,
 - (i) already knows that the material is not asbestos-containing material, or
 - (ii) already knows that the material is asbestos-containing material and, in the case of sprayed-on friable material, knows the type of asbestos; or
- (b) the work is being arranged or contracted for in accordance with this Regulation as though the material were asbestos-containing material and, in the case of sprayed-on friable material, as though it contained a type of asbestos other than chrysotile. O. Reg. 278/05, s. 10 (3).

(4) Whether an examination is required under subsection (2) or not, the owner shall have a report prepared,

- (a) stating whether,
 - (i) the material is or is not asbestos-containing material, or
 - (ii) the work is to be performed in accordance with this Regulation as though the material were asbestos-containing material and, in the case of sprayed-on friable material, as though it contained a type of asbestos other than chrysotile;

- (b) describing the condition of the material and stating whether it is friable or non-friable; and
 - (c) containing drawings, plans and specifications, as appropriate, to show the location of the material identified under clause (a). O. Reg. 278/05, s. 10 (4).
- (5) An owner shall give any prospective constructor a copy of the complete report prepared under subsection (4). O. Reg. 278/05, s. 10 (5).
- (6) Subsection (5) applies, with necessary modifications, with respect to,
- (a) a constructor and a prospective contractor; and
 - (b) a contractor and a prospective subcontractor. O. Reg. 278/05, s. 10 (6).
- (7) Subsections (8), (9) and (10) apply if, during work described in clause (1) (a), material is discovered that,
- (a) was not referred to in the report prepared under subsection (4); and
 - (b) may be asbestos-containing material. O. Reg. 278/05, s. 10 (7).
- (8) The constructor or employer shall immediately notify, orally and in writing,
- (a) an inspector at the office of the Ministry of Labour nearest the workplace;
 - (b) the owner;
 - (c) the contractor; and
 - (d) the joint health and safety committee or the health and safety representative, if any, for the workplace. O. Reg. 278/05, s. 10 (8).
- (9) The written notice referred to in subsection (8) shall include the information referred to in clauses 11 (3) (a) to (f). O. Reg. 278/05, s. 10 (9).
- (10) No work that is likely to involve handling, dealing with, disturbing or removing the material referred to in subsection (7) shall be done unless,
- (a) it has been determined under section 3 whether the material is asbestos-containing material; or
 - (b) the work is performed in accordance with this Regulation as though the material were asbestos-containing material and, in the case of sprayed-on friable material, as though it contained a type

of asbestos other than chrysotile. O. Reg. 278/05, s. 10 (10).

(11) Subsection (10) does not prohibit handling, dealing with, disturbing or removing material for the sole purpose of determining whether it is asbestos-containing material. O. Reg. 278/05, s. 10 (11).

Advance notice re Type 3 operations and certain Type 2 operations

11. (1) Before commencing a Type 3 operation, the constructor, in the case of a project, and the employer, in any other case, shall notify, orally and in writing, an inspector at the office of the Ministry of Labour nearest the workplace of the operation. O. Reg. 278/05, s. 11 (1).

(2) Subsection (1) also applies with respect to a Type 2 operation described in paragraph 9 of subsection 12 (3) in which one square metre or more of insulation is to be removed. O. Reg. 278/05, s. 11 (2).

(3) The written notice required by subsection (1) shall set out,

- (a) the name and address of the person giving the notice;
 - (b) the name and address of the owner of the place where the work will be carried out;
 - (c) the municipal address or other description of the place where the work will be carried out sufficient to permit the inspector to locate the place, including the location with respect to the nearest public highway;
 - (d) a description of the work that will be carried out;
 - (e) the starting date and expected duration of the work; and
 - (f) the name and address of the supervisor in charge of the work.
- O. Reg. 278/05, s. 11 (3).

Type 1, Type 2 and Type 3 operations

12. (1) For the purposes of this Regulation, operations that may expose a worker to asbestos are classified as Type 1, Type 2 and Type 3 operations. O. Reg. 278/05, s. 12 (1).

(2) The following are Type 1 operations:

- 1. Installing or removing ceiling tiles that are asbestos-containing material, if the tiles cover an area less than 7.5 square metres and are installed or removed without being broken, cut, drilled, abraded, ground, sanded or vibrated.
- 2. Installing or removing non-friable asbestos-containing material, other than ceiling tiles, if the material is installed or removed

without being broken, cut, drilled, abraded, ground, sanded or vibrated.

3. Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if,
 - i. the material is wetted to control the spread of dust or fibres, and
 - ii. the work is done only by means of non-powered hand-held tools.
 4. Removing less than one square metre of drywall in which joint-filling compounds that are asbestos-containing material have been used. O. Reg. 278/05, s. 12 (2).
- (3) The following are Type 2 operations:
1. Removing all or part of a false ceiling to obtain access to a work area, if asbestos-containing material is likely to be lying on the surface of the false ceiling.
 2. The removal or disturbance of one square metre or less of friable asbestos-containing material during the repair, alteration, maintenance or demolition of all or part of machinery or equipment or a building, aircraft, locomotive, railway car, vehicle or ship.
 3. Enclosing friable asbestos-containing material.
 4. Applying tape or a sealant or other covering to pipe or boiler insulation that is asbestos-containing material.
 5. Installing or removing ceiling tiles that are asbestos-containing material, if the tiles cover an area of 7.5 square metres or more and are installed or removed without being broken, cut, drilled, abraded, ground, sanded or vibrated.
 6. Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if,
 - i. the material is not wetted to control the spread of dust or fibres, and
 - ii. the work is done only by means of non-powered hand-held tools.
 7. Removing one square metre or more of drywall in which joint filling compounds that are asbestos-containing material have been used.
 8. Breaking, cutting, drilling, abrading, grinding, sanding or vibrating

non-friable asbestos-containing material if the work is done by means of power tools that are attached to dust-collecting devices equipped with HEPA filters.

9. Removing insulation that is asbestos-containing material from a pipe, duct or similar structure using a glove bag.
10. Cleaning or removing filters used in air handling equipment in a building that has sprayed fireproofing that is asbestos-containing material.
11. An operation that,
 - i. is not mentioned in any of paragraphs 1 to 10,
 - ii. may expose a worker to asbestos, and
 - iii. is not classified as a Type 1 or Type 3 operation. O. Reg. 278/05, s. 12 (3).

(4) The following are Type 3 operations:

1. The removal or disturbance of more than one square metre of friable asbestos-containing material during the repair, alteration, maintenance or demolition of all or part of a building, aircraft, ship, locomotive, railway car or vehicle or any machinery or equipment.
2. The spray application of a sealant to friable asbestos-containing material.
3. Cleaning or removing air handling equipment, including rigid ducting but not including filters, in a building that has sprayed fireproofing that is asbestos-containing material.
4. Repairing, altering or demolishing all or part of a kiln, metallurgical furnace or similar structure that is made in part of refractory materials that are asbestos-containing materials.
5. Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material, if the work is done by means of power tools that are not attached to dust-collecting devices equipped with HEPA filters.
6. Repairing, altering or demolishing all or part of any building in which asbestos is or was used in the manufacture of products, unless the asbestos was cleaned up and removed before March 16, 1986. O. Reg. 278/05, s. 12 (4).

(5) Work on ceiling tiles, drywall or friable asbestos-containing material is classified according to the total area on which work is done consecutively

in a room or enclosed area, even if the work is divided into smaller jobs.
O. Reg. 278/05, s. 12 (5).

(6) The following provisions apply if a dispute arises as to the classification of an operation under this section:

1. A party to the dispute may notify an inspector at the office of the Ministry of Labour nearest the workplace of the dispute.
2. The party who notifies the inspector shall promptly inform the other parties that the inspector has been notified.
3. Work on the operation shall cease until the inspector has given a decision under paragraph 4.
4. The inspector shall, as soon as possible, investigate the matter and give the parties a decision in writing. O. Reg. 278/05, s. 12 (6).

(7) Nothing in subsection (6) affects an inspector's power to issue an order for a contravention of this Regulation. O. Reg. 278/05, s. 12 (7).

Respirators

13. (1) A respirator provided by an employer and used by a worker in a Type 1, Type 2 or Type 3 operation,

- (a) shall be fitted so that there is an effective seal between the respirator and the worker's face, unless the respirator is equipped with a hood or helmet;
- (b) shall be assigned to a worker for his or her exclusive use, if practicable;
- (c) shall be used and maintained in accordance with written procedures that are established by the employer and are consistent with the manufacturer's specifications;
- (d) shall be cleaned, disinfected and inspected after use on each shift, or more often if necessary, when issued for the exclusive use of one worker, or after each use when used by more than one worker;
- (e) shall have damaged or deteriorated parts replaced prior to being used by a worker; and
- (f) when not in use, shall be stored in a convenient, clean and sanitary location. O. Reg. 278/05, s. 13 (1).

(2) The following additional requirements apply to a respirator of the supplied air type:

1. The compressed air used for breathing shall meet the standards set

out in Table 1 of CSA Standard Z180.1-00, Compressed Breathing Air and Systems (March, 2000).

2. If an oil-lubricated compressor is used to supply breathing air, a continuous carbon monoxide monitor equipped with an alarm shall be provided.
 3. If an ambient breathing air system is used, the air intake shall be located in accordance with Appendix B of the standard referred to in paragraph 1. O. Reg. 278/05, s. 13 (2).
- (3) If respirators are used in the workplace,
- (a) the employer shall establish written procedures regarding the selection, use and care of respirators; and
 - (b) a copy of the procedures shall be provided to and reviewed with each worker who is required to wear a respirator. O. Reg. 278/05, s. 13 (3).
- (4) A worker shall not be assigned to an operation requiring the use of a respirator unless he or she is physically able to perform the operation while using the respirator. O. Reg. 278/05, s. 13 (4).

Measures and procedures, Type 1 operations

14. The following measures and procedures apply to Type 1 operations:

1. Before beginning work, visible dust shall be removed with a damp cloth or a vacuum equipped with a HEPA filter from any surface in the work area, including the thing to be worked on, if the dust on that surface is likely to be disturbed.
2. The spread of dust from the work area shall be controlled by measures appropriate to the work to be done including the use of drop sheets of polyethylene or other suitable material that is impervious to asbestos.
3. In the case of an operation mentioned in paragraph 4 of subsection 12 (2), the material shall be wetted before and kept wet during the work to control the spread of dust or fibres, unless wetting would create a hazard or cause damage.
4. A wetting agent shall be added to water that is to be used to control the spread of dust and fibres.
5. Frequently and at regular intervals during the doing of the work and immediately on completion of the work,
 - i. dust and waste shall be cleaned up and removed using a

vacuum equipped with a HEPA filter, or by damp mopping or wet sweeping, and placed in a container as described in paragraph 5 of section 15, and

- ii. drop sheets shall be wetted and placed in a container as described in paragraph 5 of section 15, as soon as practicable after subparagraph i has been complied with.

6. Drop sheets shall not be reused.
7. After the work is completed, polyethylene sheeting and similar materials used for barriers and enclosures shall not be reused, but shall be wetted and placed in a container as described in paragraph 5 of section 15 as soon as practicable after paragraph 5 of this section has been complied with.
8. After the work is completed, barriers and portable enclosures that will be reused shall be cleaned, by using a vacuum equipped with a HEPA filter or by damp wiping, as soon as practicable after paragraphs 5 and 7 have been complied with.
9. Barriers and portable enclosures shall not be reused unless they are rigid and can be cleaned thoroughly.
10. Compressed air shall not be used to clean up and remove dust from any surface.
11. Eating, drinking, chewing or smoking shall not be permitted in the work area.
12. If a worker requests that the employer provide a respirator to be used by the worker, the employer shall provide the worker with a NIOSH approved respirator in accordance with Table 2, and the worker shall wear and use the respirator.
13. If a worker requests that the employer provide protective clothing to be used by the worker, the employer shall provide the worker with protective clothing as described in paragraph 12 of section 15, and the worker shall wear the protective clothing.
14. A worker who is provided with protective clothing shall, before leaving the work area,
 - i. decontaminate his or her protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing the protective clothing,
 - ii. if the protective clothing will not be reused, place it in a container as described in paragraph 5 of section 15.

15. Facilities for the washing of hands and face shall be made available to workers and shall be used by every worker when leaving the work area. O. Reg. 278/05, s. 14.

Measures and procedures, Type 2 and Type 3 operations

15. The following measures and procedures apply to Type 2 operations and to Type 3 operations:

1. The work area shall be identified by clearly visible signs warning of an asbestos dust hazard.
2. Signs required by paragraph 1 shall be posted in sufficient numbers to warn of the hazard and shall state in large clearly visible letters that,
 - i. there is an asbestos dust hazard, and
 - ii. access to the work area is restricted to persons wearing protective clothing and equipment.
3. A wetting agent shall be added to water that is to be used to control the spread of dust and fibres.
4. Eating, drinking, chewing or smoking shall not be permitted in the work area.
5. Containers for dust and waste shall be,
 - i. dust tight,
 - ii. suitable for the type of waste,
 - iii. impervious to asbestos,
 - iv. identified as asbestos waste,
 - v. cleaned with a damp cloth or a vacuum equipped with a HEPA filter immediately before being removed from the work area, and
 - vi. removed from the workplace frequently and at regular intervals.
6. Frequently and at regular intervals during the doing of the work and immediately on completion of the work,
 - i. dust and waste shall be cleaned up and removed using a vacuum equipped with a HEPA filter, or by damp mopping or wet sweeping, and placed in a container as described in paragraph 5, and

- ii. drop sheets shall be wetted and placed in a container as described in paragraph 5, as soon as practicable after subparagraph i has been complied with.
- 7. Drop sheets shall not be reused.
- 8. After the work is completed, polyethylene sheeting and similar materials used for barriers and enclosures shall not be reused, but shall be wetted and placed in a container as described in paragraph 5 as soon as practicable after paragraph 6 has been complied with.
- 9. After the work is completed, barriers and portable enclosures that will be reused shall be cleaned, by using a vacuum equipped with a HEPA filter or by damp wiping, as soon as practicable after paragraphs 6 and 8 have been complied with.
- 10. Barriers and portable enclosures shall not be reused unless they are rigid and can be cleaned thoroughly.
- 11. The employer shall provide every worker who will enter the work area with a NIOSH approved respirator in accordance with Table 2 and the worker shall wear and use the respirator.
- 12. Protective clothing shall be provided by the employer and worn by every worker who enters the work area, and the protective clothing,
 - i. shall be made of a material that does not readily retain nor permit penetration of asbestos fibres,
 - ii. shall consist of head covering and full body covering that fits snugly at the ankles, wrists and neck, in order to prevent asbestos fibres from reaching the garments and skin under the protective clothing,
 - iii. shall include suitable footwear, and
 - iv. shall be repaired or replaced if torn.
- 13. Compressed air shall not be used to clean up and remove dust from any surface.
- 14. Only persons wearing protective clothing and equipment shall enter a work area where there is an asbestos dust hazard. O. Reg. 278/05, s. 15.

Additional measures and procedures, Type 2 operations

16. In addition to the measures and procedures prescribed by section 15, the following measures and procedures apply to Type 2 operations:

- 1. If the operation is one mentioned in paragraph 1 of subsection

12 (3), the friable material that is likely to be disturbed shall be cleaned up and removed by using a vacuum equipped with a HEPA filter when access to the work area is obtained.

2. Before commencing work that is likely to disturb friable asbestos-containing material that is crumbled, pulverized or powdered and that is lying on any surface, the friable material shall be cleaned up and removed by damp wiping or by using a vacuum equipped with a HEPA filter.
3. Friable asbestos-containing material that is not crumbled, pulverized or powdered and that may be disturbed or removed during the work shall be thoroughly wetted before the work and kept wet during the work, unless wetting would create a hazard or cause damage.
4. Subject to paragraph 5, the spread of dust from a work area shall be controlled by measures appropriate to the work to be done, including the use of drop sheets of polyethylene or other suitable material that is impervious to asbestos.
5. If the operation is one mentioned in paragraph 1 or 2 of subsection 12 (3) and is carried on indoors, the spread of dust from the work area shall be prevented, if practicable, by,
 - i. using an enclosure of polyethylene or other suitable material that is impervious to asbestos (including, if the enclosure is opaque, one or more transparent window areas to allow observation of the entire work area from outside the enclosure), if the work area is not enclosed by walls,
 - ii. disabling the mechanical ventilation system serving the work area, and
 - iii. sealing the ventilation ducts to and from the work area.
6. Before leaving the work area, a worker shall,
 - i. decontaminate his or her protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing the protective clothing, and
 - ii. if the protective clothing will not be reused, place it in a container as described in paragraph 5 of section 15.
7. Facilities for the washing of hands and face shall be made available to workers and shall be used by every worker when leaving the work area. O. Reg. 278/05, s. 16.

Additional measures and procedures, glove bag operations

17. In addition to the measures and procedures prescribed by sections 15 and 16, the following measures and procedures apply to Type 2 operations referred to in paragraph 9 of subsection 12 (3):

1. The work area shall be separated from the rest of the workplace by walls, barricades, fencing or other suitable means.
2. The spread of asbestos-containing material from the work area shall be prevented by disabling the mechanical ventilation system serving the work area and sealing all openings or voids, including ventilation ducts to and from the working area.
3. Surfaces below the work area shall be covered with drop sheets of polyethylene or other suitable material that is impervious to asbestos.
4. The glove bag shall be made of material that is impervious to asbestos and sufficiently strong to support the weight of material the bag will hold.
5. The glove bag shall be equipped with,
 - i. sleeves and gloves that are permanently sealed to the body of the bag to allow the worker to access and deal with the insulation and maintain a sealed enclosure throughout the work period,
 - ii. valves or openings to allow insertion of a vacuum hose and the nozzle of a water sprayer while maintaining the seal to the pipe, duct or similar structure,
 - iii. a tool pouch with a drain,
 - iv. a seamless bottom and a means of sealing off the lower portion of the bag, and
 - v. a high strength double throw zipper and removable straps, if the bag is to be moved during the removal operation.
6. A glove bag shall not be used to remove insulation from a pipe, duct or similar structure if,
 - i. it may not be possible to maintain a proper seal for any reason including, without limitation,
 - A. the condition of the insulation, or
 - B. the temperature of the pipe, duct or similar structure,

- ii. the bag could become damaged for any reason including, without limitation,
 - A. the type of jacketing, or
 - B. the temperature of the pipe, duct or similar structure.
- 7. Immediately before the glove bag is attached, the insulation jacketing or coating shall be inspected for damage or defects, and if any damage or defect is present, it shall be repaired.
- 8. The glove bag shall be inspected for damage or defects,
 - i. immediately before it is attached to the pipe, duct or other similar structure, and
 - ii. at regular intervals during its use.
- 9. If damage or defects are observed when the glove bag is inspected under subparagraph 8 i, the glove bag shall not be used and shall be disposed of.
- 10. If damage or defects are observed when the glove bag is inspected under subparagraph 8 ii or at any other time,
 - i. the use of the glove bag shall be discontinued,
 - ii. the inner surface of the glove bag and the contents, if any, shall be thoroughly wetted,
 - iii. the glove bag and the contents, if any, shall be removed and placed in a container as described in paragraph 5 of section 15, and
 - iv. the work area shall be cleaned by vacuuming with a vacuum equipped with a HEPA filter before removal work is resumed.
- 11. When the removal work is completed,
 - i. the inner surface of the glove bag and the waste inside shall be thoroughly wetted and the air inside the bag shall be removed through an elasticized valve, by means of a vacuum equipped with a HEPA filter,
 - ii. the pipe, duct or similar structure shall be wiped down and sealed with a suitable encapsulant,
 - iii. the glove bag, with the waste inside, shall be placed in a container as described in paragraph 5 of section 15, and

- iv. the work area shall be cleaned by damp wiping or by cleaning with a vacuum equipped with a HEPA filter. O. Reg. 278/05, s. 17.

Additional measures and procedures, Type 3 operations

18. (1) In addition to the measures and procedures prescribed by section 15, the following measures and procedures apply to Type 3 operations:

1. The work area shall be separated from the rest of the workplace by walls, the placing of barricades or fencing or other suitable means.
2. Subsection (2) applies to an operation mentioned in paragraph 5 of subsection 12 (4).
3. Subsection (3) applies to an operation mentioned in paragraph 1, 2, 3 or 4 of subsection 12 (4) that is carried on outdoors.
4. Subsection (4) applies to an operation mentioned in paragraph 1, 2, 3, 4 or 6 of subsection 12 (4) that is carried on indoors. O. Reg. 278/05, s. 18 (1).

(2) In the case of an operation mentioned in paragraph 5 of subsection 12 (4), the following measures and procedures also apply:

1. The spread of dust from the work area shall be prevented by,
 - i. using enclosures of polyethylene or other suitable material that is impervious to asbestos (including, if the enclosure material is opaque, one or more transparent window areas to allow observation of the entire work area from outside the enclosure), if the work area is not enclosed by walls, and
 - ii. using curtains of polyethylene sheeting or other suitable material that is impervious to asbestos, fitted on each side of each entrance or exit from the work area.
2. Unless the operation is carried on outdoors, or inside a building that is to be demolished and will not be entered by any person except the workers involved in the operation and the workers involved in the demolition, the spread of dust from the work area shall also be prevented by,
 - i. creating and maintaining within the enclosed area, by installing a ventilation system equipped with a HEPA filtered exhaust unit, a negative air pressure of 0.02 inches of water, relative to the area outside the enclosed area,

- ii. ensuring that replacement air is taken from outside the enclosed area and is free from contamination with any hazardous dust, vapour, smoke, fume, mist or gas, and
 - iii. using a device, at regular intervals, to measure the difference in air pressure between the enclosed area and the area outside it.
3. The ventilation system referred to in subparagraph 2 i shall be inspected and maintained by a competent worker before each use to ensure that there is no air leakage, and if the filter is found to be damaged or defective, it shall be replaced before the ventilation system is used.
4. Before leaving the work area, a worker shall,
- i. decontaminate his or her protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing the protective clothing, and
 - ii. if the protective clothing will not be reused, place it in a container as described in paragraph 5 of section 15.
5. Facilities for the washing of hands and face shall be made available to workers and shall be used by every worker when leaving the work area. O. Reg. 278/05, s. 18 (2).

(3) In the case of an operation mentioned in paragraph 1, 2, 3 or 4 of subsection 12 (4) that is carried on outdoors, the following measures and procedures also apply:

- 1. If practicable, any asbestos-containing material to be removed shall be thoroughly wetted before and during removal, unless wetting would create a hazard or cause damage.
- 2. Dust and waste shall not be permitted to fall freely from one work level to another.
- 3. If practicable, the work area shall be washed down with water after completion of the clean-up and removal described in paragraph 6 of section 15.
- 4. Temporary electrical power distribution systems for tools and equipment involved in wet removal operations shall be equipped with ground fault circuit interrupters.
- 5. A decontamination facility shall be located as close as practicable to the work area and shall consist of,
 - i. a room suitable for changing into protective clothing and for

- ii. a shower room as described in paragraph 7 of subsection (4), and
 - iii. a room suitable for changing into street clothes and for storing clean clothing and equipment.
6. The rooms described in subparagraphs 5 i, ii and iii shall be arranged in sequence and constructed so that any person entering or leaving the work area must pass through each room.
7. When leaving the work area, a worker shall enter the decontamination facility and shall, in the following order,
- i. decontaminate his or her protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing the protective clothing,
 - ii. if the protective clothing will not be reused, place it in a container as described in paragraph 5 of section 15,
 - iii. shower, and
 - iv. remove and clean the respirator. O. Reg. 278/05, s. 18 (3).

(4) In the case of an operation mentioned in paragraph 1, 2, 3, 4 or 6 of subsection 12 (4) that is carried on indoors, the following measures and procedures also apply:

1. Friable asbestos-containing material that is crumbled, pulverized or powdered and that is lying on any surface in the work area shall be cleaned up and removed using a vacuum equipped with a HEPA filter or by damp wiping and everything shall be removed from the work area or covered with polyethylene sheeting or other suitable material that is impervious to asbestos.
2. The spread of dust from the work area shall be prevented by an enclosure of polyethylene or other suitable material that is impervious to asbestos, if the work area is not enclosed by walls, and by a decontamination facility consisting of a series of interconnecting rooms including,
 - i. a room suitable for changing into protective clothing and for storing contaminated protective clothing and equipment,
 - ii. a shower room as described in paragraph 7,
 - iii. a room suitable for changing into street clothes and for storing clean clothing and equipment, and

- iv. curtains of polyethylene sheeting or other suitable material that is impervious to asbestos, fitted to each side of the entrance or exit to each room.
3. The rooms described in subparagraphs 2 i, ii and iii shall be arranged in sequence and constructed so that any person entering or leaving the work area must pass through each room.
 4. The mechanical ventilation system serving the work area shall be disabled and all openings or voids, including ventilation ducts to or from the work area, shall be sealed by tape or other appropriate means.
 5. Unless the operation is carried on inside a building that is to be demolished and will not be entered by any person except the workers involved in the operation and the workers involved in the demolition, the spread of dust from the work area shall also be prevented by,
 - i. creating and maintaining within the enclosed area, by installing a ventilation system equipped with a HEPA filtered exhaust unit, a negative air pressure of 0.02 inches of water, relative to the area outside the enclosed area,
 - ii. ensuring that replacement air is taken from outside the enclosed area and is free from contamination with any hazardous dust, vapour, smoke, fume, mist or gas, and
 - iii. using a device, at regular intervals, to measure the difference in air pressure between the enclosed area and the area outside it.
 6. The ventilation system referred to in subparagraph 5 i shall be inspected and maintained by a competent worker before each use to ensure that there is no air leakage, and if the filter is found to be damaged or defective, it shall be replaced before the ventilation system is used.
 7. The shower room in the decontamination facility shall,
 - i. be provided with hot and cold water or water of a constant temperature that is not less than 40° Celsius or more than 50° Celsius,
 - ii. have individual controls inside the room to regulate water flow and, if there is hot and cold water, individual controls inside the room to regulate temperature,
 - iii. be capable of providing adequate supplies of hot water to

- iv. be provided with clean towels.
- 8. When leaving the work area, a worker shall enter the decontamination facility and shall, in the following order,
 - i. decontaminate his or her protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing the protective clothing,
 - ii. if the protective clothing will not be reused, place it in a container as described in paragraph 5 of section 15,
 - iii. shower, and
 - iv. remove and clean the respirator.
- 9. If practicable, existing electrical power distribution systems that are not water-tight shall be de-energized and locked out where wet removal operations are to be carried out.
- 10. Temporary electrical power distribution systems for tools and equipment involved in wet removal operations shall be equipped with ground fault circuit interrupters.
- 11. Friable asbestos-containing material shall be thoroughly wetted before and during removal, unless wetting would create a hazard or cause damage.
- 12. The work area shall be inspected by a competent worker for defects in the enclosure, barriers and decontamination facility,
 - i. at the beginning of each shift,
 - ii. at the end of a shift if there is no shift that begins immediately after the first-named shift, and
 - iii. at least once each day on days when there are no shifts.
- 13. Defects observed during an inspection under paragraph 12 shall be repaired immediately and no other work shall be carried out in the work area until the repair work is completed.
- 14. If practicable, dust and waste shall be kept wet.
- 15. On completion of the work,
 - i. negative air pressure shall be maintained if required by subparagraph 5 i,
 - ii. the inner surface of the enclosure and the work area inside

the enclosure shall be cleaned by a thorough washing or by vacuuming with a vacuum equipped with a HEPA filter,

- iii. equipment, tools and other items used in the work shall be cleaned with a damp cloth or by vacuuming with a vacuum equipped with a HEPA filter or they shall be placed in a container as described in paragraph 5 of section 15 before being removed from the enclosure, and
 - iv. a visual inspection shall be conducted by a competent worker to ensure that the enclosure and the work area inside the enclosure are free from visible dust, debris or residue that may contain asbestos.
16. Once the work area inside the enclosure is dry after the steps set out in subparagraphs 15 ii, iii and iv have been completed, clearance air testing shall be conducted by a competent worker in accordance with subsection (5), unless the operation is carried on inside a building that is to be demolished and will not be entered by any person except the workers involved in the operation and the workers involved in the demolition.
17. The barriers, enclosure and decontamination facility shall not be removed or dismantled until,
- i. cleaning has been done as described in paragraph 15, and
 - ii. if clearance air testing is required, it has been completed and the work area inside the enclosure has passed the clearance air test. O. Reg. 278/05, s. 18 (4).

(5) The following rules apply to clearance air testing:

- 1. Sample collection and analysis shall be done,
 - i. using the phase contrast microscopy method, in accordance with subsection (6), or
 - ii. using the transmission electron microscopy method, in accordance with subsection (7).
- 2. If the work area inside the enclosure fails the clearance air test, the steps set out in subparagraphs 15 ii, iii and iv of subsection (4) shall be repeated and the work area shall be allowed to dry before a further test is carried out, unless paragraph 6 of subsection (6) applies. O. Reg. 278/05, s. 18 (5).
- (6) Clearance air testing using the phase contrast microscopy method shall be carried out in accordance with U.S. National Institute of

Occupational Safety and Health Manual of Analytical Methods, Method 7400, Issue 2: Asbestos and other Fibres by PCM (August 15, 1994), using the asbestos fibre counting rules, and shall comply with the following requirements:

1. Testing shall be based on samples taken inside the enclosure.
2. Forced air shall be used, both before and during the sampling process, to ensure that fibres are dislodged from all surfaces inside the enclosure before sampling begins and are kept airborne throughout the sampling process.
3. At least 2,400 litres of air shall be drawn through each sample filter, even though the standard mentioned above provides for a different amount.
4. The number of air samples to be collected shall be in accordance with Table 3.
5. The work area inside the enclosure passes the clearance air test only if every air sample collected has a concentration of fibres that does not exceed 0.01 fibres per cubic centimetres of air.
6. If the work area inside the enclosure fails a first test that is done using the phase contrast microscopy method, the samples may be subjected to a second analysis using transmission electron microscopy in accordance with the standard mentioned in subsection (7).
7. When a second analysis is done as described in paragraph 6, the work area inside the enclosure passes the clearance air test only if every air sample collected has a concentration of asbestos fibres that does not exceed 0.01 fibres per cubic centimetre of air. O. Reg. 278/05, s. 18 (6).

(7) Clearance air testing using the transmission electron microscopy method shall be carried out in accordance with U.S. National Institute of Occupational Safety and Health Manual of Analytical Methods, Method 7402, Issue 2: Asbestos by TEM (August 15, 1994), and shall comply with the following requirements:

1. Testing shall be based on samples taken inside the enclosure and samples taken outside the enclosure but inside the building.
2. Forced air shall be used inside the enclosure, both before and during the sampling process, to ensure that fibres are dislodged from all surfaces before sampling begins and are kept airborne throughout the sampling process.

3. At least 2,400 litres of air shall be drawn through each sample filter, even though the standard mentioned above provides for a different amount.
 4. At least five air samples shall be taken inside each enclosure and at least five air samples shall be taken outside the enclosure but inside the building.
 5. Sampling inside and outside the enclosure shall be conducted concurrently.
 6. The work area inside the enclosure passes the clearance air test if the average concentration of asbestos fibres in the samples collected inside the enclosure is statistically less than the average concentration of asbestos fibres in the samples collected outside the enclosure, or if there is no statistical difference between the two average concentrations. O. Reg. 278/05, s. 18 (7).
- (8) Within 24 hours after the clearance air testing results are received,
- (a) the owner and the employer shall post a copy of the results in a conspicuous place or places,
 - (i) at the workplace, and
 - (ii) if the building contains other workplaces, in a common area of the building; and
 - (b) a copy shall be provided to the joint health and safety committee or the health and safety representative, if any, for the workplace and for the building. O. Reg. 278/05, s. 18 (8).
- (9) The owner of the building shall keep a copy of the clearance air testing results for at least one year after receiving them. O. Reg. 278/05, s. 18 (9).

Instruction and training

19. (1) The employer shall ensure that instruction and training in the following subjects are provided by a competent person to every worker working in a Type 1, Type 2 or Type 3 operation:

1. The hazards of asbestos exposure.
 2. Personal hygiene and work practices.
 3. The use, cleaning and disposal of respirators and protective clothing. O. Reg. 278/05, s. 19 (1).
- (2) The joint health and safety committee or the health and safety

representative, if any, for the workplace shall be advised of the time and place where the instruction and training prescribed by subsection (1) are to be carried out. O. Reg. 278/05, s. 19 (2).

(3) Without restricting the generality of paragraph 3 of subsection (1), the instruction and training related to respirators shall include instruction and training related to,

- (a) the limitations of the equipment;
- (b) inspection and maintenance of the equipment;
- (c) proper fitting of a respirator; and
- (d) respirator cleaning and disinfection. O. Reg. 278/05, s. 19 (3).

Asbestos abatement training programs

20. (1) The employer shall ensure that,

- (a) every worker involved in a Type 3 operation has successfully completed the Asbestos Abatement Worker Training Program approved by the Ministry of Advanced Education and Skills Development; and
- (b) every supervisor of a worker involved in a Type 3 operation has successfully completed the Asbestos Abatement Supervisor Training Program approved by the Ministry of Advanced Education and Skills Development. O. Reg. 278/05, s. 20 (1); O. Reg. 62/18, s. 2 (1).

(2) The employer shall ensure that every worker and supervisor successfully completes the appropriate program required under subsection (1) before performing or supervising the work to which the program relates. O. Reg. 278/05, s. 20 (2).

(3) A document issued by the Ministry of Advanced Education and Skills Development, showing that a worker has successfully completed a program mentioned in subsection (1), is conclusive proof, for the purposes of this section, of his or her successful completion of the program. O. Reg. 278/05, s. 20 (3); O. Reg. 62/18, s. 2 (1).

(4) REVOKED: O. Reg. 62/18, s. 2 (2).

Asbestos work report

21. (1) The employer of a worker working in a Type 2 operation or a Type 3 operation shall complete an asbestos work report in a form obtained from the Ministry for each such worker,

- (a) at least once in each 12-month period; and
 - (b) immediately on the termination of the employment of the worker. O. Reg. 278/05, s. 21 (1).
- (2) As soon as the asbestos work report is completed, the employer shall,
- (a) forward it to the Provincial Physician, Ministry of Labour, and
 - (b) give a copy to the worker. O. Reg. 278/05, s. 21 (2).
- (3) For the purposes of clause (2) (a), the employer may deliver the report to the Provincial Physician in person or send it by ordinary mail, by courier or by fax. O. Reg. 278/05, s. 21 (3).

Asbestos Workers Register

22. (1) The Provincial Physician, Ministry of Labour, shall establish and maintain an Asbestos Workers Register listing the name of each worker for whom an employer submits an asbestos work report under section 21. O. Reg. 278/05, s. 22 (1).

(2) On the recommendation of the Provincial Physician, a worker who is listed in the Register may volunteer to undergo the prescribed medical examination described in paragraph 1 of subsection (4). O. Reg. 278/05, s. 22 (2).

(3) A worker who has undergone the prescribed medical examination described in paragraph 1 of subsection (4) may volunteer to undergo subsequent examinations of the same type if they are recommended by his or her physician. O. Reg. 278/05, s. 22 (3).

(4) The following medical examinations are prescribed for the purposes of subsection 26 (3) of the Act:

1. An examination consisting of a medical questionnaire, chest x-rays and pulmonary function tests.
2. A subsequent examination that consists of the components described in paragraph 1, is recommended by the worker's physician and takes place at least five years after the most recent examination. O. Reg. 278/05, s. 22 (4); O. Reg. 450/19, s. 1.

(5) A worker who is removed from exposure to asbestos because an examination discloses that he or she may have or has a condition resulting from exposure to asbestos and suffers a loss of earnings as a result of the removal from exposure to asbestos is entitled to compensation for the loss in the manner and to the extent provided by the *Workplace Safety and Insurance Act, 1997*. O. Reg. 278/05, s. 22 (5).

Use of equivalent measure or procedure

23. A constructor, in the case of a project, or the employer, in any other case, may vary a measure or procedure required by this Regulation if the following conditions are satisfied:

1. The measure or procedure, as varied, affords protection for the health and safety of workers that is at least equal to the protection that would be provided by complying with this Regulation.
2. The constructor or employer gives written notice of the varied measure or procedure, in advance, to the joint health and safety committee or the health and safety representative, if any, for the workplace. O. Reg. 278/05, s. 23.

Notice to inspector

24. (1) When this Regulation requires written notice to an inspector at an office of the Ministry of Labour, the notice shall be given,

- (a) by delivering it to the office in person;
- (b) by sending it by ordinary mail, by courier or by fax, or
- (c) by sending the notice to the inspector by electronic means that are acceptable to the Ministry. O. Reg. 278/05, s. 24 (1).

(2) When this Regulation requires oral notice to an inspector at an office of the Ministry of Labour, the notice shall be given,

- (a) in person;
- (b) by telephoning the inspector; or
- (c) by sending the notice to the inspector by electronic means that are acceptable to the Ministry. O. Reg. 278/05, s. 24 (2).

25. OMITTED (REVOKES OTHER REGULATIONS). O. Reg. 278/05, s. 25.

26. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 278/05, s. 26.

TABLE 1
BULK MATERIAL SAMPLES

Subsection 3 (3)

Item	Type of material	Size of area of homogeneous material	Minimum number of bulk material samples to be collected
1.	Surfacing material, including without limitation material that is applied to surfaces by spraying, by troweling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on structural members	Less than 90 square metres	3
		90 or more square metres, but less than 450 square metres	5
		450 or more square metres	7
2.	Thermal insulation, except as described in item 3	Any size	3
3.	Thermal insulation patch	Less than 2 linear metres or 0.5 square metres	1
4.	Other material	Any size	3

O. Reg. 278/05, Table 1.

TABLE 2
RESPIRATORS
Paragraph 12 of section 14 and paragraph 11 of section 15

Column 1	Column 2
Work Category	Required respirator
Type 1 Operations	
Worker requests that the employer provide a respirator to be used by the worker, as described in paragraph 12 of section 14	Air purifying half-mask respirator with N-100, R-100 or P-100 particulate filter
Type 2 Operations	
Work described in paragraph 1 of subsection 12 (3)	One of the following: – Air purifying full-facepiece respirator with N-100, R-100 or P-100 particulate filter – Powered air purifying respirator equipped with a tight-fitting facepiece (half or full-facepiece) and a high efficiency filter or N-100, P-100 or R-100 particulate filter – Negative pressure (demand) supplied air respirator equipped with a full-facepiece – Continuous flow supplied air respirator equipped with a tight fitting facepiece (half or full-facepiece)
Work described in paragraphs 2 to 7 and 9 to 11 of subsection 12 (3)	Air purifying half-mask respirator with N-100, R-100 or P-100 particulate filter

Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable material containing asbestos by means of power tools, if the tool is attached to a dust collecting device equipped with a HEPA filter as described in paragraph 8 of subsection 12 (3)	Material is not wetted	One of the following: – Air purifying full-facepiece respirator with N-100, R-100 or P-100 particulate filter – Powered air purifying respirator equipped with a tight-fitting facepiece (half or full-facepiece) and a high efficiency filter or N-100, P-100 or R-100 particulate filter – Negative pressure (demand) supplied air respirator equipped with a full-facepiece – Continuous flow supplied air respirator equipped with a tight fitting facepiece (half or full-facepiece)
	Material is wetted to control spread of fibre	Air purifying half-mask respirator with N-100, R-100 or P-100 particulate filter

Type 3 Operations		
Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable material containing asbestos by means of power tools, if the tool is not attached to a dust collecting device equipped with a HEPA filter as described in paragraph 5 of subsection 12 (4)	Material is not wetted	Pressure demand supplied air respirator equipped with a half mask
	Material is wetted to control spread of fibre	One of the following: – Air purifying full-facepiece respirator with N-100, R-100 or P-100 particulate filter – Negative pressure (demand) supplied air respirator equipped with a full-facepiece – Continuous flow supplied air respirator equipped with a tight fitting facepiece (half or full-facepiece)
Work with friable material containing asbestos, as described in paragraphs 1 to 4 and 6 of subsection 12 (4)	Material is not wetted	Pressure demand supplied air respirator equipped with a full facepiece

Table 2

Regulation 278/05 - Designated Substance - Asbestos
on Construction Projects and in Buildings and Repair Operations

Work with friable material, as described in paragraphs 1 to 4 and 6 of subsection 12 (4), that contains a type of asbestos other than chrysotile	Material was applied or installed by spraying, and is wetted to control spread of fibre	Pressure demand supplied air respirator equipped with a half mask
Work with friable material, as described in		One of the following: -Air purifying full-facepiece respirator with N-100, R-100 or P-100 particulate filter -Powered air purifying respirator equipped with a tight-fitting facepiece (half or full-facepiece) and a high efficiency filter or N-100, P-100 or R-100 particulate filter -Negative pressure (demand) supplied air respirator equipped with a full-facepiece -Continuous flow supplied air respirator equipped with a tight fitting facepiece (half or full-facepiece)
paragraphs 1 to 4 and 6 of subsection 12 (4), that contains only chrysotile asbestos		

Work with friable material containing asbestos, as described in paragraphs 1 to 4 and 6 of subsection 12 (4)	Material was not applied or installed by spraying, and is wetted to control spread of fibre	One of the following: – Air purifying full-facepiece respirator with N-100, R-100 or P-100 particulate filter – Powered air purifying respirator equipped with a tight-fitting facepiece (half or full-facepiece) and a high efficiency filter or N-100, P-100 or R-100 particulate filter – Negative pressure (demand) supplied air respirator equipped with a full-facepiece – Continuous flow supplied air respirator equipped with a tight fitting facepiece (half or full-facepiece)

O. Reg. 278/05, Table 2.

TABLE 3
AIR SAMPLES

Paragraph 4 of subsection 18 (6)

Minimum number of air samples to be taken from each enclosure	Area of enclosure
2	10 square metres or less
3	More than 10 but less than 500 square metres
5	500 square metres or more

O. Reg. 278/05, Table 3.

ONTARIO REGULATION 420/21**NOTICES AND REPORTS UNDER SECTIONS 51 TO 53.1 OF THE ACT
— FATALITIES, CRITICAL INJURIES, OCCUPATIONAL ILLNESSES AND
OTHER INCIDENTS**

Consolidation Period: From August 8, 2023 to the e-Laws currency date.

Last amendment: 242/23.

This is the English version of a bilingual regulation.

Interpretation

1. (1) For the purposes of the Act and the Regulations, “critically injured” means an injury of a serious nature that,

- (a) places life in jeopardy,
- (b) produces unconsciousness,
- (c) results in substantial loss of blood,
- (d) involves the fracture of a leg or arm but not a finger or toe,
- (e) involves the amputation of a leg, arm, hand or foot but not a finger or toe,
- (f) consists of burns to a major portion of the body, or
- (g) causes the loss of sight in an eye. R.R.O. 1990, Reg. 834, s. 1.

“medical attention” means treatment from a legally qualified medical practitioner or a registered nurse who holds an extended certificate of registration under the Nursing Act, 1991. (“soins médicaux”)

(2) In this Regulation

- (a) expressions relating to diving operations have the same meaning as in Ontario Regulation 629/94 (Diving Operations) made under the Act;
- (b) expressions relating to construction projects have the same meaning as in Ontario Regulation 213/91 (Construction Projects) made under the Act;
- (c) expressions relating to mines and mining plants have the same meaning as in Regulation 854 of the Revised Regulations of Ontario, 1990 (Mines and Mining Plants) made under the Act; and
- (d) expressions relating to X-ray safety have the same meaning as in

Application

2. (1) Subject to subsection (2), this Regulation applies to all workplaces to which the Act applies.

(2) Section 3 does not apply when a worker is killed, critically injured, disabled from performing his or her usual work or requires medical attention as a result of a collision involving a motor vehicle that occurs on a highway, as defined under the Highway Traffic Act, or on the private toll highway known as Highway 407, unless,

- (a) the worker affected was working at a project; or
- (b) the worker affected was not travelling in the motor vehicle at the time of the collision.

Section 51 report and section 52 notice

3. (1) The information listed in subsection (2) is prescribed as information the employer must provide in a written report or written notice if,

- (a) a worker is killed or critically injured from any cause at a workplace as described in subsection 51 (1) of the Act;
- (b) a worker is disabled from performing his or her usual work or requires medical attention because of an accident, explosion, fire or incident of workplace violence at a workplace, but no person dies or is critically injured because of that occurrence as described in subsection 52 (1) of the Act; or
- (c) the employer is advised by or on behalf of a worker that the worker has an occupational illness or that a claim in respect of an occupational illness has been filed with the Workplace Safety and Insurance Board by or on behalf of the worker as described in subsection 52 (2) of the Act.

(2) The information referred to in subsection (1) is the following:

- 1. The name, address and type of business of the employer.
- 2. The name of the worker referred to in clause (1) (a), (b) or (c).
- 3. The nature of the bodily injury or occupational illness.
- 4. For a written report involving a worker referred to in clause (1) (a),
 - i. the name and address of the constructor if the occurrence is at a project,

- S. 3(2)5 O. Reg. 420/21: Notices and Reports under Sections 51 to 53.1 of the Act
Fatalities, Critical Injuries, Occupational Illnesses and Other Incidents
- ii. the address of the worker,
 - iii. the nature and circumstances of the occurrence, including a description of any machinery, equipment or procedure involved,
 - iv. the time, date and place of the occurrence, and
 - v. the name and address of the legally qualified medical practitioner, registered nurse who holds an extended certificate of registration under the Nursing Act, 1991 or medical facility that is attending to or attended to the worker.
5. For a notice involving a worker referred to in clause (1) (b),
- i. the nature and circumstances of the occurrence, including a description of any machinery, equipment or procedure involved, and
 - ii. the time, date and place of the occurrence.
6. For a notice involving a worker referred to in clause (1) (c), a description of the cause or suspected cause of the occupational illness.
7. The names and addresses or other contact information of any witnesses to the occurrence.
8. The steps taken to prevent a recurrence or further illness.

Section 53 notices

4. (1) The information listed in subsection (2) is prescribed as information to be provided in a written notice if,
- (a) an accident, premature or unexpected explosion, fire, flood or inrush of water, cave-in, subsidence or rockburst occurs at a project site, mine or mining plant as described in subsection 53 (1) of the Act;
 - (b) the failure of any equipment, machine, device, article or thing occurs at a project site, mine or mining plant as described in subsection 53 (1) of the Act that could have posed a risk to worker life, health or safety; or
 - (c) an incident prescribed under subsection (3) occurs.
- (2) The information referred to in subsection (1) is the following:
- 1. The name, address and type of business of the employer.

2. For an occurrence at a project, the name and address of the constructor.
3. The time, date and place of the occurrence.
4. The nature and circumstances of the occurrence, including a description of any machinery, equipment or procedure involved.
5. The steps taken to prevent a recurrence.

(3) The following incidents are prescribed as incidents where notice must be provided under subsection 53 (1) of the Act:

1. Where Ontario Regulation 629/94 (Diving Operations) made under the Act applies,
 - i. a diver becomes trapped underwater,
 - ii. a diver fails to comply with the decompression requirements prescribed by Ontario Regulation 629/94 (Diving Operations),
 - iii. there is a failure of any diving equipment posing a risk to the health or safety of a diver,
 - iv. there is an emergency rescue of a diver in a submersible compression chamber or atmospheric diving system,
 - v. there is an emergency use of a recompression chamber,
 - vi. a person becomes unconscious, or
 - vii. a diver suffers from decompression sickness.
2. Where Ontario Regulation 213/91 (Construction Projects) made under the Act applies,
 - i. a worker falls a vertical distance of three metres or more,
 - ii. a worker falls and the fall is arrested by a fall arrest system other than a fall restricting system,
 - iii. a worker becomes unconscious for any reason,
 - iv. there is accidental contact by a worker or by a worker's tool or equipment with energized electrical equipment, installations or conductors,
 - v. there is accidental contact by a crane, similar hoisting device, backhoe, power shovel or other vehicle or equipment or its load with an energized electrical conductor rated at more than 750 volts,
 - vi. there is a structural failure of all or part of falsework designed

- S. 4(3)2vi O. Reg. 420/21: Notices and Reports under Sections 51 to 53.1 of the Act
Fatalities, Critical Injuries, Occupational Illnesses and Other Incidents
by, or required by Ontario Regulation 213/91 (Construction Projects) to be designed by, an engineer,
- vii. there is a structural failure of a principal supporting member, including a column, beam, wall or truss, of a structure,
 - viii. there is a failure of all or part of the structural supports of a scaffold,
 - ix. there is a structural failure of all or part of an earth- or water-retaining structure, including a failure of the temporary or permanent supports for a shaft, tunnel, caisson, cofferdam or trench,
 - x. there is a failure of a wall of an excavation or of similar earthwork with respect to which an engineer has given a written opinion that the stability of the wall is such that no worker will be endangered by it
 - xi. there is an overturning or a structural failure of all or part of a crane or similar hoisting device, or
 - xii. there is a failure to control a crane or a load, including any rigging failure, except where permitted under section 162 of Ontario Regulation 213/91 (Construction Projects) made under the Act.
3. Where Regulation 854 of the Revised Regulations of Ontario, 1990 (Mines and Mining Plants) made under the Act applies,
- i. a failure occurs in or to a hoist, sheave, hoisting rope, shaft conveyance, shaft timbering or shaft lining,
 - ii. flammable gas is present in a workplace in an underground mine,
 - iii. spontaneous heating with evolution of gas occurs in a workplace,
 - iv. a major failure or major damage occurs or is caused to electrical equipment, standard gauge railroad equipment, a crane or a motor vehicle underground,
 - v. a rockburst occurs causing damage to equipment or the displacement of more than five tonnes of material,
 - vi. an uncontrolled fall of ground occurs causing damage to equipment or the displacement of more than 50 tonnes of material,
 - vii. a fuse, a detonator or an explosive is found to be defective,
 - viii. a structural failure occurs in any matter or thing for which

a design by an engineer is prescribed by Regulation 854 of the Revised Regulations of Ontario, 1990 (Mines and Mining Plants), or

- ix. an unexpected and uncontrolled run of material, water or slimes in excess of one cubic metre occurs that could have endangered a worker.

4. Where Regulation 861 of the Revised Regulations of Ontario, 1990 (X-ray Safety) made under the Act applies,

- i. a worker has received, in a period of three months, a dose equivalent in excess of the annual limits set out in Column 4 of the Schedule to Regulation 861 of the Revised Regulations of Ontario, 1990 (X-ray Safety), or
- ii. an accident, failure of any X-ray source or other incident may have resulted in a worker receiving a dose equivalent in excess of the annual limits set out in Column 3 of the Schedule to Regulation 861 of the Revised Regulations of Ontario, 1990 (X-ray Safety).

(4) The following persons are prescribed for the purposes of clause 53 (2) (c) of the Act as the persons required to give written notice for incidents occurring at the following locations:

- 1. For an incident that occurs at a diving operation, the employer of a worker who works at the diving operation.
- 2. For an incident described in paragraph 4 of subsection (3) that occurs at a workplace where Regulation 861 of the Revised Regulations of Ontario, 1990 (X-ray Safety) applies, the employer of the worker.

Section 53.1 notices — additional notices

- 5. (1) A constructor or employer who submits a written report to a Director under subsection 51 (1) of the Act or gives a written notice under section 52 or 53 of the Act shall also supplement the report or notice with an engineer's written opinion stating the cause of the occurrence if,
 - (a) the incident occurs at a workplace where Ontario Regulation 213/91 (Construction Projects) made under the Act applies and involves a failure of all or part of,
 - (i) temporary or permanent works,
 - (ii) a structure,

- S. 5(1)(a.1) O. Reg. 420/21: Notices and Reports under Sections 51 to 53.1 of the Act
Fatalities, Critical Injuries, Occupational Illnesses and Other Incidents
- (iii) a wall of an excavation or of similar earthwork for which an engineer has given written opinion that the stability of the wall is such that no worker will be endangered by it, or
 - (iv) a crane or similar hoisting device;
- (a.1) the incident occurs at a workplace where Ontario Regulation 213/91 (Construction Projects) made under the Act applies and involves a failure to control a crane or a load, including any rigging failure, except where permitted under section 162 of that Regulation;
- (b) the incident occurs at a workplace where Ontario Regulation 67/93 (Health Care and Residential Facilities) made under the Act applies and involves the collapse or failure of a temporary or permanent structure that was designed by an engineer or architect; or
- (c) the incident occurs at a workplace where Regulation 859 of the Revised Regulations of Ontario, 1990 (Window Cleaning) made under the Act applies and involves the collapse or failure of a temporary or permanent support or structure that was designed by an engineer.
- (2) The professional engineer's written opinion shall be provided within 14 days after the occurrence.

Records

6. The employer or constructor shall retain a copy of a written notice or report required under sections 51 to 53.1 of the Act for at least three years after the date the notice or report is made.

Electronic form

7. For greater certainty,

- (a) requirement under sections 51 to 53.1 of the Act to send a written report or to give written notice to a Director may be satisfied by submitting a form on a website of the Government of Ontario; and
- (b) a requirement under sections 51 to 53.1 of the Act to send a written report or to give written notice to the committee, the health and safety representative and the trade union, if any, may be satisfied by providing the committee, the health and safety representative and the trade union with an electronic copy of the form referred to in clause (a).

8. Omitted (amends, repeals or revokes other legislation).

9. Omitted (provides for coming into force of provisions of this Regulation).

ONTARIO REGULATION 243/95

CRITERIA TO BE USED AND OTHER MATTERS TO BE CONSIDERED BY THE BOARD UNDER SUBSECTION 46 (6) OF ACT

Consolidation Period: From January 26, 2009 to the e-Laws currency date.

Last amendment: 22/09.

This is the English version of a bilingual regulation.

1. For the purpose of subsection 46 (6) of the Act, the following criteria are prescribed for determining whether the constructor or employer has demonstrated a failure to protect the health and safety of workers:

1. The record of accidents, deaths, injuries and work-related illnesses in the workplace.
 2. The constructor's or employer's occupational health and safety policies and the length of time they have been in place.
 3. The training, communications and programs established to implement the policies under paragraph 2, and the length of time they have been in place.
 4. The constructor's or employer's health and safety record under the Act, including,
 - i. complaints made to the Ministry of Labour against the constructor or employer,
 - ii. work refusals under section 43 of the Act,
 - iii. the Board's or adjudicators' decisions under section 46 of the Act,
 - iv. work stoppages under sections 45 and 47 of the Act,
 - v. the results of inspections conducted by the Ministry,
 - vi. convictions for contraventions of the Act or the regulations made under it,
 - vii. the record of compliance with inspectors' orders.
 5. Any other factors that it is reasonable to consider in the circumstances. O. Reg. 243/95, s. 1; O. Reg. 22/09, s. 2.
- 2.** The following matters are prescribed as matters to be considered by

the Board in deciding upon an application under section 46:

1. Any previous occasion on which the Board or an adjudicator found under that section that the procedure for stopping work set out in section 45 of the Act would not be sufficient to protect the constructor's or employer's workers.
 2. The constructor's or employer's course of conduct with respect to the establishment and operation of the committee and the appointment and certification of its members.
 3. A pattern, if any, of the constructor or employer dealing in bad faith with the committee.
 4. The nature and extent of the health and safety hazards at the workplace, including the risks they pose and whether adequate measures have been established to respond to them.
 5. If the measures established to respond to the health and safety hazards are not adequate, the length of time that would be required to establish adequate measures and the degree of intervention by an inspector that would be necessary.
 6. Any other matters that it is reasonable to consider in the circumstances. O. Reg. 243/95, s. 2; O. Reg. 22/09, s. 3.
- 3. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THE ENGLISH VERSION OF THIS REGULATION). O. Reg. 243/95, s. 3.**

ONTARIO REGULATION 385/96

JOINT HEALTH AND SAFETY COMMITTEES — EXEMPTION FROM REQUIREMENTS

Consolidation Period: From January 26, 2009 to the e-Laws currency date.

Last amendment: 19/09.

This is the English version of a bilingual regulation.

1. In this Regulation,

“ordinary worker” does not include a participant in community participation under the *Ontario Works Act, 1997*; (“travailleur ordinaire”)

“volunteer worker” means a worker who performs work or supplies a service but who receives no monetary compensation for doing so other than an allowance for expenses or an honorarium. (“travailleur bénévole”) O. Reg. 385/96, s. 1; O. Reg. 131/98, s. 1.

2. A workplace at which fewer than 20 ordinary workers are regularly employed is exempted from clause 9 (2) (a) of the Act. O. Reg. 385/96, s. 2.

3. A project at which fewer than 20 ordinary workers are regularly employed is exempted from clause 9 (2) (c) of the Act. O. Reg. 385/96, s. 3.

4. The following workplaces are exempt from subsection 9 (12) of the Act:

1. A workplace at which fewer than 20 ordinary workers (who are not volunteer workers) are regularly employed.
2. A project at which fewer than 50 ordinary workers (who are not volunteer workers) are regularly employed. O. Reg. 385/96, s. 4.

5. OMITTED (REVOKES OTHER REGULATIONS). O. Reg. 385/96, s. 5.

6. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 385/96, s. 6.

R.R.O. 1990, REGULATION 858

UNIVERSITY ACADEMICS AND TEACHING ASSISTANTS

Consolidation Period: From June 28, 1991 to the e-Laws currency date.

Last amendment: 353/91.

This is the English version of a bilingual regulation.

1. The Act applies to every person who is employed as a member or teaching assistant of the academic staff of a university or of a related institution. R.R.O. 1990, Reg. 858, s. 1.

ONTARIO REGULATION 33/12**OFFICES OF THE WORKER AND EMPLOYER ADVISERS**

Consolidation Period: From April 1, 2012 to the e-Laws currency date.

No amendments.

This is the English version of a bilingual regulation.

Functions of the Offices of the Worker and Employer Advisers

1. (1) For the purposes of Part VI (Reprisals by Employer Prohibited) of the Act, the functions of the Office of the Worker Adviser are to educate, advise and represent in proceedings before the Board workers who are not members of a trade union. O. Reg. 33/12, s. 1 (1).

(2) For the purposes of Part VI (Reprisals by Employer Prohibited) of the Act, the functions of the Office of the Employer Adviser are to educate, advise and represent in proceedings before the Board employers that have fewer than 50 employees. O. Reg. 33/12, s. 1 (2).

2. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 33/12, s. 2.

ONTARIO REGULATION 381/15**NOISE**

Consolidation Period: From July 1, 2016 to the e-Laws currency date.

No amendments.

This is the English version of a bilingual regulation.

Interpretation

1. (1) In this Regulation,

“attenuation” means a reduction in sound pressure level incident upon the ear; (“atténuation”)

“dBA” means a measure of sound level in decibels using a reference sound pressure of 20 micropascals when measured on the A-weighting network of a sound level meter; (“dBA”)

“decibel” means a unit of measurement of sound pressure level that is equal to 20 times the logarithm to the base 10 of the ratio of the pressure of a sound, divided by the reference pressure of 20 micropascals. (“décibel”)

(2) An equivalent sound exposure level is the steady sound level in dBA which, if present in a workplace for eight hours in a day, would contain the same total energy as that generated by the actual and varying sound levels to which a worker is exposed in his or her total work day.

(3) The equivalent sound exposure level is determined in accordance with the formula,

$$L_{eq,8} = 10 \text{ Log}_{10} \left(\frac{\left[\sum_{i=1}^n (t_i \times 10^{0.1 \text{ SPL}_i}) \right]}{8} \right)$$

Text alternative: Image of the mathematical equation for determining the equivalent sound exposure level over eight hours that contains the same total energy as that generated by the actual and varying sound levels to which a worker is exposed in his or her total work day. This text alternative is provided for convenience only and does not form part of the official law.

in which,

$L_{ex,8}$ is the equivalent sound exposure level in 8 hours,

Σ is the sum of the values in the enclosed expression for all activities from $i = 1$ to $i = n$,

i is a discrete activity of a worker exposed to a sound level,

t_i is the duration in hours of i ,

SPL_i is the sound level of i in dBA,

n is the total number of discrete activities in the worker's total workday.

Duty to protect workers

2. (1) Every employer shall take all measures reasonably necessary in the circumstances to protect workers from exposure to hazardous sound levels.

(2) The protective measures shall include the provision and use of engineering controls, work practices and, subject to subsection (5), hearing protection devices.

(3) Any measurement of sound levels in the workplace that is done in order to determine what protective measures are appropriate shall be done without regard to the use of hearing protection devices.

(4) Without limiting the generality of subsections (1) and (2), every employer shall ensure that no worker is exposed to a sound level greater than an equivalent sound exposure level of 85 dBA, $L_{ex,8}$.

(5) Except in the circumstances set out in subsection (6), the employer shall protect workers from exposure to a sound level greater than the limit described in subsection (4) without requiring them to use and wear hearing protection devices.

(6) Workers shall wear and use hearing protection devices appropriate in the circumstances to protect them from exposure to a sound level greater than the limit described in subsection (4) if engineering controls are required by subsections (1) and (2) and,

- (a) are not in existence or are not obtainable;
- (b) are not reasonable or not practical to adopt, install or provide because of the duration or frequency of the exposures or because of the nature of the process, operation or work;
- (c) are rendered ineffective because of a temporary breakdown of

such controls; or

- (d) are ineffective to prevent, control or limit exposure because of an emergency.

(7) Where practicable, a clearly visible warning sign shall be posted at every approach to an area in the workplace where the sound level, measured as described in subsection (3), regularly exceeds 85 dBA.

Training and instruction

3. An employer who provides a worker with a hearing protection device shall also provide adequate training and instruction to the worker in the care and use of the device, including its limitations, proper fitting, inspection and maintenance and, if applicable, the cleaning and disinfection of the device.

Hearing protection devices

4. (1) A hearing protection device shall be selected having regard to,

- (a) sound levels to which a worker is exposed;
- (b) the attenuation provided by the device; and
- (c) the manufacturer's information about the use and limitations of the device.

(2) A hearing protection device shall be used and maintained in accordance with the manufacturer's instructions.

5. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION).

ONTARIO REGULATION 559/22**NALOXONE KITS**

Consolidation Period: From June 1, 2023 to the e-Laws currency date.

No amendments.

This is the English version of a bilingual regulation.

Definition

1. In this Regulation,
“safety-engineered needle” means,
 - (a) a hollow-bore needle that,
 - (i) is designed to eliminate or minimize the risk of a skin puncture injury to the worker, and
 - (ii) is licensed as a medical device by Health Canada, or
 - (b) a needleless device that,
 - (i) replaces a hollow-bore needle, and
 - (ii) is licensed as a medical device by Health Canada.
2. For the purposes of clause 25.2 (1) (b) of the Act, the following requirements respecting the provision and maintenance of naloxone kits are prescribed:
 1. Every naloxone kit shall be used, stored and maintained in accordance with the manufacturer’s instructions.
 2. The contents of each naloxone kit must be kept in a hard case.
 3. The contents of each naloxone kit must be for a single use and promptly replaced after such use.
 4. The contents of each naloxone kit must not have expired.
 5. The names and workplace locations of the workers who are in charge of the naloxone kit in the workplace and who have received the training referred to in subsection 25.2 (3) of the Act shall be posted in a conspicuous place in the vicinity of the kit where their names and workplace locations are most likely to come to the attention of other workers.

Contents of naloxone kits

3. For the purposes of subsection 25.2 (6) of the Act, the following contents are prescribed:

1. For a nasal spray naloxone kit,
 - i. two doses of intra-nasal spray, with each dose containing 4 mg/0.1 ml of naloxone hydrochloride,
 - ii. one rescue breathing barrier, and
 - iii. one pair of non-latex gloves.
2. For an injectable naloxone kit,
 - i. two vials or two ampoules, with each vial or ampoule containing a 0.4 mg/1 ml dose of naloxone,
 - ii. for each ampoule included in the kit, one device to safely open the ampoule, such as a breaker, snapper or opener,
 - iii. two syringes, with each syringe attached to a 25 gauge safety-engineered needle that measures 1 inch in length,
 - iv. two alcohol swabs,
 - v. one rescue breathing barrier, and
 - vi. one pair of non-latex gloves.

4. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION).

OCCUPATIONAL HEALTH AND SAFETY ACT

A

accidents

- at project site or mine, 87
- explosion, fire or violence causing injury, 86

adjudicator, decision final, 101

administration, 12

- administration of act, 12
- advisory committees, 14
- amendment of standard, 14
- appointment of inspectors and directors, 14

certificate of appointment, 13

certification of members, 15

collection and use of training information, 15

contribution to defray cost, 34

delegation of powers, 13

industrial hygiene testing, 31

joint health and safety committee, 22

mandatory selection of health and safety representative, 19

powers under federal legislation, 34

standards-persons providing training, 14

standards-training programs, 13

testimony in civil proceedings, 33

validity of approval, 14

worker trades committee, 30

administrator, appointment of, 43

advisers, offices of, 85

advisory committees, 33

amendment of standard, 40

appeals

- expedited, 100
- toxic substances and, 63

appeals from order of an inspector conflict with Statutory Powers Procedure Act, 100

decision of adjudicator final, 101

effective date of rules, 100

entering premises, 100

expedited, 100

hearings, 99

inquiry by labour relations officer, 99

order extended meaning, 101

orders after consultation, 99

parties, 99

powers of the Board, 101

practice and procedure, 99

quorum, 100

reconsideration, 101

report to board, 99

rules not regulations, 100

rules of practice, 100

suspension of order, 101

application, 11

appointment, certificate of, 13

appointment of inspectors and Directors, 13

approval

code of practice, 60

effect of approved code, 62

persons who provide training, 14

publication of, 61

training program, 14

arbitration, reprisals by employer, 82

Architects Act, 55

architects and engineers, 55

architects and engineers, duties of, 55

assessment

for hazardous materials, 68

of risks of violence, 56

order for written, 92

assessments

for hazardous materials

availability of, 68

B

barricaded area, entry into, 97

- bilateral work stoppage, 77
- cancellation of direction, 80
- constructor's or employer's duties, 78
- delegation by certified member, 78
- direction following investigation, 77
- investigation by inspector, 78
- investigation by second certified member, 77
- board
 - defined (commission), 5
 - penalty substitution, 83
 - powers of (enforcement), 101
 - procedure, right to refuse or to stop work, 81
- Building Code Act, 1974, 5
- Building Code Act, 1980, 5
- Building Code Act, 1990, 5
- Building Code Act, 1992, 5
- building code, defined (code du bâtiment), 5
- business information,
 - confidentiality of, 68
- C
- Canada Labour Code, 34
- certificate of appointment, 13
- certified copies of documents, etc., as evidence, 108
- certified member, defined (membre agréé), 5
- Chief Prevention Officer
 - advising on change, 39
 - annual report, 38
 - appointment of, 37
 - certification of members, 15
 - defined (directeur général de la prévention), 5
 - delegation, 19
 - functions of, 36
 - information provided to, 15
 - minister's approval, 38
 - occupational health and safety strategy, 37
 - prevention council, 38
 - publication, 38
 - strategy provided to Minister, 38
- civil proceedings, testimony in, 33
- civil suit, compellability, 103
- claims board
 - appeals, 69
 - determination of claim, 69
 - effect of claim, 69
 - effect of determination, 69
- codes of practice, 60
 - approval of, 60
 - definition, 60
 - delegation, 60
 - publication of approval, 61
- committees
 - advisory types, 33
 - defined (comité), 5
 - determining maximum entitlement, 31
 - joint health and safety, 22
 - obstruction of, 102
 - worker trades, 30
- compellability, enforcement and, 104
- competent person, defined (personne compétente), 5
- complaint, determination of, 81
- compliance
 - achieved, enforcement and, 98
 - and monitoring of designated entities, 42
 - plans, enforcement, 95
- confidential business information, 68
 - appeals, 69
 - determination of claim, 69
 - effect of claim, 69
 - effect of determination, 69
- conflict, enforcement and, 104
- construction, defined, 5

constructors
 defined (constructeur), 5
 duties of, 44, 54
 constructor's or employer's duties,
 45, 78, 80
 consultation on industrial hygiene
 testing, 31
 convictions, publications of, 109
 Coroners Act, 82, 104
 Corporations Act, 44
 costs
 contribution to defray cost, 34
 inspectors, 79
 reprisals of employer, 85
 crown and other acts, 11
 Crown Forest Sustainability Act, 7
 Crown Liability and Proceedings
 Act, 2019, 105

D

dangerous circumstances, defined,
 77
 data sheets, toxic substances, 65
 death or injury, notice of, 85
 decision final, bilateral work
 stoppage, 79
 declaration against constructor,
 etc.
 board procedure, etc., 78
 costs of inspector, 79
 criteria, 79
 decision final, 79
 declaration and
 recommendation, 79
 minister a party, 78, 81
 definition and non-application,
 right to refuse or to stop
 work, 77
 definitions, 5
 delegation of powers
 by certified member, 78
 codes of practice and, 60
 toxic substances and, 63

delegation of powers and duties,
 administration and, 44
 deputy minister, defined (sous-
 ministre), 5
 designated entities
 report to Minister, 42
 designated entities
 advice to minister, 43
 amendment of standard, 40
 appointment of administrator, 43
 compliance and monitoring of,
 42
 compliance date, 41
 delegation of powers and duties,
 44
 duty to comply, 40
 effect of designation, 42
 eligible for grant, 40
 failure to comply, 42
 government directives, 42
 meeting of members, 44
 minister designations, 40
 powers and duties, 43
 publication of standards, 41
 report, directions, 44
 standards, 40
 term of appointment, 43
 transition, 41
 unincorporated entity, 44
 designated substance (substance
 désignée), 5
 directions
 duties of, 55
 directions, effect of designation,
 42
 director
 defined (directeur), 6
 notice to (toxic substances), 66
 power to disclose (enforcement),
 104
 providing information, 32
 director, acting as inspector, 13
 director, orders of (toxic
 substances)

- appeal to minister, 63
- application, 64
- contents of order, 62
- delegation, 63
- matters to be considered, 64
- no hearing required, 65
- posting of order, 63
- procedure, 63
- remuneration of appointee, 64
- substitution of findings, 64
- suspension of order by minister, 64
- directors and inspectors,
 - appointment of, 13
- discipline, dismissal, etc., by employer
 - arbitration, 82
 - board may substitute penalty, 83
 - inquiry by board, 83
 - inquiry by Board, 83
 - jurisdiction, 83
 - onus of proof, 83
 - referral by inspector, 82
 - rules to expedite proceedings, 83
- disclosures
 - Chief Prevention Officer, 15
 - limit on, 58
 - training providers, 15
- dispute resolution, 30
- documents, production of, 104
- domestic violence, 57
- duties and employers and other persons, 44
- duties of employers and other persons, 44
 - consent to medical surveillance, 52
 - constructors, 44, 54
 - directors and officers of a corporation, 55
 - employers, 45
 - licensees, 45
 - owners, 52
 - project owners, 53
 - supervisor, 51
 - suppliers, 54
 - workers, 51
 - duties re violence, 57
 - duty to consider, 13
 - dwellings, entry to, 90
- E
- Education Act, 12
- employer
 - adviser, offices of, 85
 - defined (employeur), 6
 - duties of, 45, 49, 78
- employer's or constructor's duties, 78, 80
- Employment Standards Act, 2000, 47
- enforcement, 88
 - appeals from order of an inspector, 98
 - copies of reports, 105
 - entry into barricaded area, 97
 - immunity, 105
 - information confidential, 103
 - injunction proceedings, 98
 - notice of compliance, 97
 - obstruction of inspector, 101
 - order for written assessment, 92
 - order for written policies, 91
 - orders by inspector where worker endangered, 96
 - power of inspector to seize, 94
 - powers of inspector, 88
 - warrants - investigative techniques, etc., 92
- engineer of the Ministry, defined (ingénieur du ministère), 6
- engineers and architects, duties of, 55
- entering premises, 100
- explosion, notices, 86
- expenses and remuneration
 - advisory committees, 33

- prevention council and, 36
- F
 - factory, defined (usine), 6
 - failure to comply, 42
 - false information, enforcement and, 102
 - farming operations, 11
 - federal legislation, powers under, 34
 - fees, duties of employers, 53
 - fire, notice of, 86
 - Fire Protection and Prevention Act, 1997, 72
 - footwear, 48
 - funding and delivery of services, changes to
 - chief prevention officer and, 39
 - matters to consider, 39
 - minister proposes change, 38
 - prevention council endorsement, 39
 - regulation and, 39
 - significant changes, 39
- G
 - government directives, 42
 - grant eligible, designated entities and, 40
- H
 - harassment
 - duties, 59
 - program, 58
 - hazardous identification and data sheet
 - hazardous material not to be used, 66
 - notice to director, 66
 - prohibition, 66
 - hazardous material
 - defined (matériau dangereux), 7
 - hazardous materials
 - assessment for, 68
 - identification, 65
 - Hazardous Materials Information Review Act, 70
 - hazardous physical agents
 - defined (agent physique dangereux), 7
 - duty of employer, 71
 - notices, 71
 - health and safety representative
 - defined (délégué à la santé et à la sécurité), 7
 - mandatory selection of, 19
 - order appointing, 19
 - powers of, 20
 - selection of representatives, 20
 - health records, employer access to, 103
 - hearing requirements, toxic substances and, 65
 - hearings, enforcement and, 99
 - homework, defined (travail à domicile), 7
- I
 - industrial establishment, defined (établissement industriel), 7
 - industrial hygiene testing, consultation on, 31
 - information confidential
 - compellability, 103
 - conflict, 104
 - copies of reports, 105
 - employer access to health records, 103
 - medical emergencies, 104
 - power of director to disclose, 104
 - production of documents, 104
 - information privileged, 69
 - injunction proceedings, 98
 - inspections

- joint health and safety committee, 27
- schedule of, 28
- inspector
 - and directors, appointment of, 13
 - costs of, 79
 - defined (inspecteur), 7
 - obstruction of, 101
 - orders where non-compliance, 95
 - report to justice, 94
 - searches in exigent circumstances, 95
- inspector, powers of
 - consultation with workers, 91
 - enforcement, 88
 - entitlement to time from work, 91
 - entry to dwellings, 90
 - representative to accompany inspector, 90
- investigation, entitlement to, 80
- investigation, refusal to work, 74
- J
- joint health and safety committee
 - additional powers of, 30
 - application, 22
 - certification requirement, 25
 - co-chair, power of, 27
 - committee to be co-chaired, 25
 - composition of committee, 24
 - designation of, 25
 - entitlement to be paid, 29
 - entitlement to time from work, 31
 - establishment of committee, 23
 - exceptions, 29
 - information reported to, 28
 - inspections, 27
 - meetings, 29
 - membership requirements, 25
 - minister considerations, 24
 - minister's order, 22
 - minutes of proceedings, 27
 - posting of names and work locations, 29
 - powers of committee, 26
 - replacement of members, 26
 - response to recommendations, 27
 - selection of members, 24
 - judicial notice, 61
 - jurisdiction, reprisals by employer and, 83
- L
- Laboratory and Specimen Collection Centre Licensing Act, 73
- Labour Relations Act, 1995, 7, 9, 63, 83
- labour relations officer
 - defined (agent des relations de travail), 7
 - inquiries by, 99
- legal requirement, defined, 60
- Legislation Act, 2006, 100
- liability
 - constructors, 54
 - licensed area, defined, 45
 - of crown, enforcement, 105
- licensee
 - defined (titulaire d'un permis), 7
 - duties of, 45
- logging
 - defined (exploitation forestière), 7
- M
- maximum entitlement, committee to determine, 31
- medical emergencies, enforcement and, 104

medical surveillance, consent to, 52
 meetings, joint health and safety committee, 29
 mine
 defined (mine), 7
 plans, 52
 mining plant, defined (installation minière), 7
 minister
 considerations, 19
 defined (ministre), 8
 designated entities and, 40
 joint health and safety committee, 22
 minister, powers of, 12
 ministry, defined (ministère), 8
 monitoring devices, 102

N

Naloxone kits, 48
 definition, 49
 employer duties, 48
 training, 49
 non-application, refusal to work, 72
 non-disclosure, 33
 Non-disclosure prevails, toxic substances, 70
 notice of accident, inspection by representative, 21
 notice of compliance, 98
 notice of project, 44
 notices, 85
 Nuclear Safety and Control Act, 34

O

The Ontario Gazette, 61, 65
 obstruction of committee, etc., 102
 obstruction of inspector, 101
 occupational health and safety administration, 12

application, 11
 codes of practice, 60
 definitions, 5
 duties of employers and other persons, 44
 enforcement, 88
 notices, 85
 offences and penalties, 106
 prevention council, chief prevention officer and designated entities, 34
 regulations, 110
 reprisals by employer prohibited, 82
 right to refuse or stop work, 72
 toxic substances, 62
 violence and harassment, 55
 Occupational Health and Safety Statute Law Amendment Act, 2011, 16, 41
 occupational health and safety strategy, 36
 occupational illness
 defined (maladie professionnelle), 8
 notice of, 86
 offences and penalties, 106
 certified copies of documents, etc., as evidence, 108
 limitation on prosecutions, 109
 place of trial, 109
 publication re convictions, 109
 office of the employer adviser
 defined (bureau des conseillers des employeurs), 8
 Office of the Worker Adviser, defined (Bureau des conseillers des travailleurs), 8
 officers of a corporation, duties of, 55
 Ontario Building Code, 5
 Ontario Labour Relations Board, 5
 onus of proof, 83

- order, extended meaning, 101
- order for inspections, 91
- order for written assessment, 92
- order for written policies, 91
- orders after consultation, 99
- orders by inspectors where non-compliance
 - compliance plan, 95
 - contents of order, 95
 - hearing requirements, 97
 - posting of notice, 96
 - resumption of work pending inspection, 96
 - worker endangered, 96
- owner
 - defined (propriétaire), 8
 - duties of, 52
- P
- payment, entitlement to, 29, 76, 81
- penalties, 106
 - accused liable for acts or neglect of managers, agents, etc., 107
 - additional orders, 107
 - aggravating factors, 106
 - defence, 107
- Personal Health Information Protection Act, 2004, 104
- Police Services Act, 72, 84
- policies
 - order for written, 91
 - violence and harassment, 55
- possession, warrants and, 94
- posting of names and work locations, 29
- posting, written form violence and harassment, 55
- powers, delegation of, 13, 44
- prescribed, defined (prescrit), 8
- prevention council, 35
 - advice of, 37
 - appointment of members, 35
 - chair, 35
 - composition, 35
 - endorsement of change, 39
 - functions of, 35
 - remuneration and expenses, 33
- prevention council, chief
 - prevention officer and designated entities, 34
- changes to funding and delivery of services, 38
- chief prevention officer and, 36
- designated entities and, 40
- private residences, 11
- procedure, right to refuse and to stop work, 81
- proceedings, rules to expedite, 83
- Professional Engineers Act, 55
- programs
 - harassment (contents), 58
 - violence (contents), 56
- prohibition, toxic substances, 66
- project
 - defined (chantier), 8
 - notice of, 44
 - owners, 53
- prosecutions, limitation on, 109
- Provincial Offences Act, 94, 102
- provision of information, violence, 58
- public access, toxic substances, 67
- publication
 - re convictions, 109
- publications
 - chief prevention officer and, 38
 - disclosure, 109
 - effect of publication, 61
 - internet, 109
 - judicial notice, 61
 - of approval, 61
 - of standards, 14
- Public Service of Ontario Act, 2006, 33, 36, 83

- Q
- quorum, 100
- R
- reassessment, risks of violence, 57
- recommendations, response to, 21
- referral by inspector, reprisals by employer, 82
- refusal to work
- duty to advise other workers, 76
 - entitlement to be paid, 76
 - following investigation, 74
 - investigation by inspector, 75
 - non-application to certain workers, 72
 - report of refusal, 74
 - worker available for investigation, 74
 - worker in safe place, 75
- regulations, 110
- making as advisable for health or safety of persons, 110
 - taxi industry, 115
- regulations, defined (règlements), 8
- remuneration and expenses
- advisory committees, 33
 - prevention council and, 36
- remuneration of appointee
- toxic substances and, 64
- reports, copies of, 105
- representative, powers of, 20
- reprisals by employer prohibited
- no discipline, dismissal, etc., by employer, 82
 - office of the worker and employer adviser, 85
- residences, private, 11
- revocation of approval, 15
- right to refuse or to stop work
- bilateral work stoppage, 77
 - complaint re direction to stop work, 81
 - dangerous circumstances, defined, 77
 - declaration against constructor, 78
 - entitlement to investigate, 80
 - non-application, 77
 - refusal to work, 72
 - unilateral work stoppage, 79
- rules not regulations, 100
- S
- safety data sheets
- employer, 65
 - making available, 66
- seize, power of inspector, 94
- self-employed persons, 12
- ship under repair, 10
- shop, defined (magasin), 8
- standards
- designated entities and, 40
 - persons providing training, 14
 - publication of, 14, 41
 - training programs, 13
- Statutory Powers Procedure Act, 99
- substances, designation of, 65
- summary, posting copy, 32
- supervisor
- duties of, 51
- supervisor, defined (superviseur), 9
- supervisor, duties of, 51
- suppliers, duties of, 54
- surveillance, consent to medical, 52
- T
- teachers, etc., 12
- tenders, duties of, 54
- testimony in civil proceedings, etc., 33
- testing

- attendance, 31
 - consultation on industrial hygiene, 31
 - time from work, entitlement to, 21, 29, 31
 - toxic substances, 62
 - appeals, 69
 - assessment for hazardous materials, 68
 - confidential business information, 68
 - designation of substances, 65
 - determination of claim, 69
 - effect of claim, 69
 - hazardous material identification and data sheets, 65
 - hazardous physical agents, 70
 - information privileged, 69
 - instruction and training, 71
 - orders of the director, 62
 - remuneration of appointee, 64
 - safety data sheets, 66
 - trade union, defined (syndicat), 9
 - training
 - collection and use of information, 15
 - standards and approval of persons providing, 14
 - training program
 - approval of, 14
 - standards of, 13
 - training provider, disclosure by, 15
 - transition, 16
- U
- unincorporated entity, 44
- V
- validity of approval, 14
 - violence and harassment, 55
 - assessment of risks of violence, 56
 - domestic violence, 57
 - duties re violence, 57
 - information and instruction, 60
 - policies, violence and harassment, 55
 - program, harassment, 58
 - program, violence, 56
 - workplaces, plans of, 52
 - violence and Harassment, 55
 - violence, notice of, 86
- W
- warrants - investigative techniques, etc.
 - duration, 93
 - expert help, 93
 - notice and receipt, 94
 - possession, 94
 - powers and duties not restricted, 94
 - procedure, 94
 - report to justice, 94
 - terms and conditions, 93
 - washroom access, 53
 - exceptions, 53
 - witness, compellability of, 104
 - worker
 - defined (travailleur), 9
 - duties of, 51
 - adviser, offices of, 85
 - worker trades committee
 - entitlement to time from work, 31
 - function, 30
 - membership, 30
 - selection of members, 30
 - workplace, defined (lieu de travail), 9
 - workplace harassment, defined (harcèlement au travail), 9
 - Workplace Safety and Insurance Act, 1997, 8, 16, 31, 34, 41, 85

Workplace Safety and Insurance

Board, 29, 31

workplace sexual harassment,

defined (harcèlement

sexuel au travail), 10

workplaces, plans of, 52

workplace violence, defined

(violence au travail), 10

work stoppage, 77

wreckage, preservation of, 85

written assessment, order for, 92

written form, posting, 55

written policies, order for, 91

Y

Youth Criminal Justice Act

(Canada), 73

Young Offenders Act (Canada), 73

REGULATION 851 - INDUSTRIAL ESTABLISHMENTS

- A**
- access ladders, 132
 - adequate, 121
 - adequately, 121
 - adjusting, cleaning, and oiling machinery, 149
 - aluminum magnesium collector, 148
 - apparatus, defined (appareil), 124
- B**
- barrels, drums, and keg storage, 142
 - barriers, warning signs and,, 133
 - bins, silos, and hopper storage, 142
 - biological, chemical agents, training, 166
 - blowing devices, 148
 - boom, 121
 - boots (gaiter-types), as protective clothing, 155
 - bracing and shoring safeguards, 148
 - bucking, defined (tronçonnage), 157
 - Building Code Act, 121
 - buildings, 163–164
 - building code applicability, 163
 - fire extinguishers, 164
 - hazardous room, 164
 - burning, as disposal, 147
 - chipper operator, training, 158
 - cleaning, adjusting, and oiling machinery, 149
 - clearances, machinery regulations, 130
 - collectors, aluminum magnesium, 148
 - compressed air or gas blowing devices, 148
 - compressed gas storage cylinder, 142
 - conductors
 - certification requirements, 139
 - power supplies to, 139
 - safety requirements, 139
 - containers
 - molten materials, 156
 - repairs, 150
 - control stations, conveyors, 136
 - conveyors
 - control stations and, 136
 - guards and, 136
 - cord-connected equipment, 141
 - cranes
 - molten materials and, 155
 - supporting workers, 144
 - cupolas, supports and, 155
 - cutter-skidder operator program training, 158
 - cut-to-length processor operator, training, 158
 - cylindrical object storage, 142
- C**
- Canadian Standards Association, 139
 - canopy usage, logging, 161
 - centrifugal extractors, separators or dryers, 136
 - chain saws, safety requirements, 139
 - chicot, defined (chicot), 157
 - damaged structure, 148
 - delimber operator, training, 158
 - disconnecting power supply sources, 139
 - disposal by burning, 147
 - distribution systems, outdoor, 141
 - drink, drinking water, 166
 - drums, barrels, and keg storage,

- 142
- drum, tank, pipeline alterations, 150
- dust explosion, potential for, 148
- E
- egress, means of, 153
- electrical burns, protection from, 140
- electrical equipment
 - certification requirements, 139
 - safety requirements, 139
- electrical installations, power supplies and, 139
- Electrical Safety Authority, 139
- electrical shock, protection from, 140
- electrical tools, outdoor usage, 141
- electrical transmission systems, 141
- Electricity Act (1998), 139
- Elevating Devices (Ontario Regulation 209/01), 121
- emergency stops, machine guarding, 135
- entertainment and advertising industry, 123
- entrances and enclosures, signs and, 139
- equipment
 - electricity conducting, 141
 - foreign particles and, 148
 - mobile signaller, 145
 - power supplies to, 139
 - refuelling mobile or portable, 147
 - unattended, 146
- explosions, dust, 147
- explosive actuated fastening tools, 136
- explosive loads, 138
- eye wash facilities, 165
- F
- fall arrest systems, 151
- falling
 - liquid hazards, 151
 - material, 136
 - material hazards, 142
 - prevention of, 151
- fastening tools, explosive actuated, 136
- fees and forms, 130
- feller buncher operator training, 158
- fellling area, 159
- fellling area, defined (parterre de coupe), 157
- finés
 - schedule 67.3, 169
 - schedule 67.4, 178
- Fire Code (Ontario Regulation 213/07), 124, 164
- Fire Protection and Prevention Act (1997), 124, 164
- fire-resistance rating defined (indice de résistance au feu), 121
- firing mechanisms, explosive actuated fastening tools, 136
- flammable liquid
 - defined (liquide inflammable), 121
 - fire prevention-protection, 133
- flammable liquids, dispensing, 134
- food, industrial hygiene and, 166
- foot injury prevention, 150
- forms and fees, 130
- forwarder/transporter operator, training, 158
- foundry, defined (fonderie), 121
- fumes, gases, and vapours, 147

- G**
- gangways
 - markings, 154
 - widths, 154
 - gas blowing devices, 148
 - gases, vapours, and fumes, 147
 - gasoline, refuelling mobile or
 - portable equipment, 147
 - grapple skidder operator, training, 158
 - grinding wheels, machine
 - guarding, 135
 - ground fault circuit interrupter, 141
 - ground faults, 141
 - guardrails, 131
 - guards, conveyors, 136
- H**
- hair length, safety requirements, 150
 - hand shank ladles and crucibles, usage, 154
 - hang ups
 - defined (encroué), 157
 - occurrences of, 160
 - haul roads
 - bridges and, 162
 - defined (chemin d'exploitation), 157
 - hazardous rooms
 - defined, 164
 - safety requirements, 164
 - hazards
 - dust explosions, 148
 - eye injuries, 150
 - falling materials, 142
 - foot injury prevention, 150
 - head injury exposure, 150
 - jewellery and clothing, 150
 - preventing falls, 151
 - skin injury prevention, 150
 - health and safety reviews, pre-
 - start, 124
 - Highway Traffic Act, 157, 163
 - hoppers, bins, and silo storage, 142
- I**
- industrial establishments
 - air replacement, 165
 - application, 123
 - biological, chemical agent
 - training, 166
 - building codes, 163
 - buildings, 163
 - definitions, 121
 - equivalency, 122
 - eye wash facilities, 164
 - food, drink, and tobacco use, 166
 - hot and cold water supplies, 167
 - industrial hygiene, 164
 - material removal, 165
 - mechanical ventilation, 168
 - potable drinking water, 166
 - protective clothing, disinfecting, 167
 - providing eating areas, 167
 - providing privacy rooms, 167
 - replacement air and, 165
 - safety regulations, 123
 - shower rooms and lockers,
 - providing, 167
 - in-running nip hazards, machine
 - guarding, 135
 - insulating materials
 - certification requirements, 139
 - safety requirements, 139
 - interlocking devices, material
 - guarding, 136
- J**
- jewellery, safety requirements, 150

K

kegs, barrels, and drum storage,
142

L

ladders

fixed, 132

portable, 149

ladles, hand shanks and, 155

landing area, defined (dépôt
transitoire), 157

lifting device

defined (appareil de levage),
121

pre-start health and safety
review, 124

safety requirements, 143

lift trucks, cranes and, 144

lighting, safety regulations, 133

limbing, defined (ébranchage),
157

lockout, 139, 149

log

defined (bille), 149

hauling regulations, 161

logger, defined (travailleur
forestier), 157

logging, 156

canopy usage, 161

cutter-skidder programs, 159

hang ups, 160

hauling logs, 161

haul road bridges and, 162

haul roads, 162

loading and unloading, 161

mechanical harvesting training,
158

skidding and, 161

spring poles and, 160

tree felling, 159

vehicle specifications, 161

M

machine guarding, 135

centrifugal extractors and, 136

chain saws and, 139

conveyors and, 136

cord-connected equipment, 141

disconnecting power supply
sources, 139

electrical equipment, insulating,
conductors, 139

electrical transmission systems,
141

electricity conducting
equipment, 141

emergency stops and, 135

entrances and enclosures signs,
139

explosive actuated fastening,
136

exposed moving parts, 135

grinding wheels and, 135

ground faults and, 141

in-running nip hazards, 135

live exposed installation,
conductors, equipment,
139

moving machinery, 136

nailing guns, 138

operating controls, 135

overhead protection and, 136

tumbling mills/dryers, 136

waste stock and, 135

wet locations equipment usage,
141

maintenance and repairs, 148

cleaning, adjusting, and oiling,
149

container repair safety, 150

elevated materials, 149

ladders, portable, 149

starting machinery, 149

structural collapse prevention,
148

tire inflation, 150
 material handling, 141
 barrels, drums, and kegs, 142
 blowing devices, 148
 collectors, 148
 compressed gas storage
 cylinders, 142
 cranes and lift trucks, 144
 cylindrical objects, 142
 disposal by burning, 147
 dust hazards, 147
 falling materials, 142
 lifting devices, 143
 machinery, equipment or, 142
 material, articles, or things, 141
 maximum rated loads, 143
 mobile equipment, 145
 piping systems, 147
 power equipment, 146
 power line distances, 146
 refuelling requirements, 147
 silos, bins, hoppers, 142
 steel transport, 145
 tipping hazards, 142
 transport vehicles, 145
 travelling cranes, 145
 unattended vehicles, 146
 material, removal of, 165
 mats, rubber gloves, and shields,
 140
 measures/procedure
 development, 152
 mechanical harvesting training,
 158
 mechanical ventilation, 168
 metal fragments, safety, 156
 metal scraps, safety precautions,
 156
 minimum age requirements, safety
 regulations, 123
 Ministry of Training, Colleges and
 Universities, 158
 mobile equipment, 145
 moisture and ice, molten materials

 and, 156
 molten material, 152
 boot and legging requirements,
 155
 communicating emergencies,
 153
 containers, holding and
 transporting, 156
 conveying, 154
 cranes width requirements and,
 155
 cupolas and, 155
 developing measures/
 procedures, 152
 egress, means to, 152
 enclosed vessels, 156
 floor and water system safety,
 156
 galleries and mezzanines, 156
 marking gangways, 154
 metal scrap safety, 156
 moisture and ice, 156
 pouring aisle widths, 155
 preventing contact with, 152
 safe maintenance distances,
 153
 spillage and, 152
 tilting ladle supports, 155

N

nailing guns, hand-held, 138
 nip hazards, in-running, 135

O

oiling, cleaning, and adjusting
 machinery, 149
 Ontario Regulation 632/05
 (Confined Spaces), 142
 operating and maintenance space
 requirements, 153
 operating controls, machine
 guards and, 135
 outdoor distribution systems, 141

overhead protection
 falling material hazards and,
 136
 machine guarding, 136

P

pipeline, drum, tank alterations,
 150
 piping systems, 147
 potable drinking water, 166
 pouring aisle
 defined (allée de coulée), 122
 width requirements, 154
 powered equipment, 146
 power lines distance rates, 146
 power supply source
 requirements, 139
 premises regulations, 130
 access ladders, 132
 barriers and warning signs, 133
 clearances, 130
 door requirements, 132
 elevated equipment, 133
 floor and surface requirements,
 130
 guardrail requirements, 131
 using coverings, 132
 walkways, service stairs, stiles,
 132
 pre-start health and safety review
 inclusions, 125
 pre-start health and safety
 reviews, 124
 prime mover
 defined (élémentmoteur), 122
 exposed parts and, 135
 procedure/measures,
 development of, 152
 protective clothing, disinfecting,
 167
 protective element, defined
 (élément protecteur), 124
 protective equipment, 150

clothing and training
 requirements, 150
 eye protection, 150
 foot injury prevention, 150
 hair length requirements, 150
 head protection, 150
 jewellery and clothing
 guidelines, 150
 preventing falls, 151
 skin injury prevention, 150

R

rack or stacking structures,
 prestart health and safety
 review, 128
 rated loads, 143
 refuelling requirements, 147
 registered, defined, 158
 repairs and maintenance, safety
 regulations, 148

S

safety and health reviews,
 prestart, 124
 safety belts, fall prevention and,
 151
 safety devices, disinfecting, 167
 safety regulations, 123
 fees and forms, 130
 fire prevention, 133
 lighting, 133
 logging, 156
 machine guarding, 135
 maintenance and repairs, 148
 material handling, 141
 molten material, 152
 premises, 130
 pre-start health and safety
 reviews, 124
 schedule 67.3, 169
 schedule 67.4, 178
 securing machinery, equipment, or
 material, 142

service room, defined (local technique), 122
 shoring and bracing safeguards, 148
 signallers, use of, 145
 silos, bins, and hopper storage, 142
 skidding
 defined (débusquage), 157
 safety regulations, 161
 skin injuries, prevention of, 150
 slasher operator, training, 158
 snag, defined (obstacle), 157
 spillage, defined, 152
 spray booth, defined (cabine de pulvérisation), 124
 spring pole
 cutting and, 160
 defined (perche sous tension), 160
 stair width, premises regulations, 132
 stake, defined (ridelle), 157
 starting machinery, safety requirements, 149
 stile width, premises regulations, 132
 storage, cylindrical objects and, 142
 structural collapse prevention, 148

T

Table, defined (tableau), 124
 tank, drum, pipeline alterations, 150
 Technical Standards and Safety Act (2000), 121
 temperature, 166
 tilting ladle supports, 155
 tobacco usage, industrial hygiene and, 166
 training programs, logging, 158

transmission equipment
 defined (organe de transmission), 122
 exposed parts and, 135
 transporting materials, 141
 transport vehicles, 145
 travelling cranes
 pre-start health and safety review, 129
 safety requirements, 145
 tree, defined (arbre), 157
 tumbling mills and dryers, 136

V

vapours, gases, and fumes, 147
 ventilation requirements, 165
 mechanical, 168
 vessels, enclosed, 156

W

walkway width, premises regulations, 132
 warning signs, live electrical parts and, 139
 washrooms, 163
 water system safety, molten materials and, 156
 working space
 defined (aire de travail), 122
 work rests, grinding wheels and, 136
 work surface, employer safety failure (fine), 169

REGULATION 213/91 - CONSTRUCTION PROJECTS

A

access at heights, 246
 access ladders, 230
 accident notices and reports, 194
 adequate, defined (adéquat), 183
 adequately, defined (adéquatement), 183
 adjacent structures, protection of, 330
 age requirements, 193
 air compressors, 373
 air lock, defined (sas), 364
 air locks and work chambers, 374
 alarm systems, 204
 allowable suspended load, defined (charge suspendue admissible), 251
 allowable unit stress, defined (taux de contrainte admissible), 183
 alloy steel chains, 312
 American National Standards Institute (ANSI), 189
 anchorage connector, defined (connecteur d'ancrage), 251
 anchor systems, 201
 application and interpretation
 excavation, 328
 general, 183
 general construction, 194
 tunnels, shafts, caissons and cofferdams, 339
 work in compressed air, 364
 Apprenticeship Act, 2009, 294
 approved, defined (approuvé), 183

B

backhoe
 leaving unattended, 235
 load passes and, 235
 barricade
 defined (repère), 220
 highway projects and, 220

barrier
 defined (barrière), 220
 highway projects and, 220
 baskets as work places, 240
 beams
 common, 210
 bitumen or hot tar roadtankers, 325
 blasting operations, 360
 blocker truck
 defined (camion-barrière), 183
 highway projects and, 220
 blocking
 installation of, 240
 removal of, 212
 blow torch, fire prevention, 246
 boat
 power-driven, 204
 seaworthy, 204
 boatswain's chairs
 scaffolds and suspended platforms, 251
 boatswain's chair, suspended work platforms
 application, 251
 design, 252
 equipment, 260
 requirements, pre-use, 260
 testing, 258
 use requirements, project specific, 269
 worker training, 255
 body belts and saddles for work
 positioning and travel restraint, 196
 body harnesses, suspended
 platforms and, 272
 boom, defined (flèche), 183
 boom-type elevating work platform, 279
 bracing and shoring shafts, 350
 brakes and seat requirements, 234
 breathing apparatus, 345
 buckets as workplaces, 240

- Building Code, 183, 201, 207, 218, 252, 261, 274
- bulldozer, leaving unattended, 235
- C
- cables, slings, rigging
 - load support capabilities, 311
 - requirements for use by cranes, 312
- cab or screen, as protection, 234
- caisson, defined (caisson), 184
- caissons, tunnels, shafts and cofferdams, 339. See also tunnels, shafts, caissons and cofferdams
- Canadian Standards Association (CSA), 189
- chain-saws
 - kickback and, 241
 - personal protective equipment and, 241
 - training and, 241
- chutes
 - requirements, 211
 - used for lowering rubbish or debris, 211
- cleat, defined (tasseau), 335
- clothing, protective, 194
- code of signals, 348
- cofferdam, defined (batardeau), 184
- cofferdams, caissons, tunnels and shafts, 339. See also tunnels, shafts, caissons and cofferdams
- combustible, corrosive or toxic substance storage, 213
- communications
 - access to, 194, 346
 - tunnels, etc., 347
 - work in compressed air and, 367
- competent worker, defined (travailleur compétent), 184
- compressed air, 364
 - air compressors, 373
 - air locks and work chambers, 374
 - communications, 367
 - decompression procedures, 383
 - defined (air comprimé), 364
 - electric buzzer or bell system, 367
 - fire prevention, 368
 - general requirements, 365
 - inspection and, 366
 - interpretation and application, 364
 - lighting and electrical supply, 369
 - lock tenders, 381
 - medical locks, 372
 - medical requirements, 369
 - sanitation, 369
 - signals, 367
 - superintendent of work, 365
 - work and rest periods, 380
 - worker requirements, 366
 - written notice, 365
- compressed gas, storage cylinder, 213
- conduit, defined (canalisation), 184
- connecting components for personal fall arrest systems, 196
- constructor
 - approved notification and, 191
 - conditions to start work, 191
 - posting notifications, 191
 - project length, 191
- container, drum, tank or pipeline
 - repair or alteration, 216
- control valve, storage cylinders and, 213
- corrosive, combustible or toxic substance, containers, 213
- covered way requirements, 220
- coverings, protective, 197

- cranes
 - full body harness, 286
 - hoisting and rigging, 282
 - leaving unattended, 235
 - modifications or repairs to
 - boom, 286
 - operator's crane log, 285
 - platform design drawings, 286
 - platform inspection, 287
 - platform verification, 287
 - raising and lowering workers, 285
 - worker certification, 283
- crash trucks
 - defined (camion d'intervention), 184
 - highway projects and, 220
- critical weld
 - certification, no proof, 255
 - defined (soudure essentielle), 184
 - testing, employer, 259
- CSA Standard Z271-10, defined (norme CSA Z271-10), 251
- cutting and welding, general construction, 246
- cutting equipment, fire prevention, 246
- cylinders, piping and fittings,
 - damage protection, 246
- D
 - DANGER sign requirements, 214
 - debris removal, 211
 - decompression
 - atmospheric pressure and, 383
 - procedures, 383
 - reports and, 384
 - sickness, 384
 - decompression sickness, defined (mal de décompression), 364
 - delineators, highway projects and, 220
 - demolition and damaged structures
 - basement, cellar or excavations and, 327
 - crane or hoisting device use and, 326
 - danger to workers and, 325
 - disconnecting truss or girder, 327
 - dismantling or moving, 326
 - glass removal and, 327
 - masonry walls and, 327
 - material removal by worker and, 327
 - precautions and, 326
 - systematic approach to, 327
 - derricks, stiff-leg derricks and descent control devices, 306
 - devices, protective clothing, and equipment, 194
 - director designation of project parts, 190
 - documents, requirements for prepared, 189
 - drilling or charging operations, 361
 - drinking water
 - cups, sharing, 205
 - piping systems or containers, 205
 - providing means of drinking, 205
 - drowning risk, 204
 - drum, tank, pipeline or container repair or alternation, 216
 - drywall finishing work, 241
 - dump truck, alarm and signals when reversing, 239
 - dust control, general construction, 219
 - dust, gas, vapour or fume mixture with air, 215
 - dust hazards, 219

- E
 - egress, access to, 214, 224, 338, 351
 - electrical equipment, installation, conductors and insulating material
 - defective types, 321
 - disconnecting, 316
 - grounded casing, 320
 - maintenance, modifying, 313
 - storing equipment near, 314
 - electrical hazards
 - electrician certification, 313
 - exposed energized electrical parts, 313
 - measures and procedures, 315
 - reasonable precautions, 313
 - rubber gloves and, 319
 - shock and burn protection, 315
 - signs, 315
 - stored electrical energy, 316
 - warning devices, 315
 - electrical tools, portable, 320
 - Electrical Utility Safety Rules, 313
 - Electrician certification, 313
 - Electricity Act, 1998, 314
 - electricity supply, 349
 - elevating work platforms
 - design of, 279
 - maintenance and inspection record tag, 281
 - operators manual, 282
 - requirements, 282
 - testing of, 280
 - training and instruction, 281
 - emergencies
 - egress access and, 224
 - procedure review, 194
 - written measures and procedures, 315
 - written procedures for, 194
 - energized overhead equipment, 314
 - energy absorbers and lanyards, 196
 - engineered support system, defined (système de soutien calculé), 328
 - engineering practices, requirements and, 189
 - engineer, professional
 - trench design and, 191
 - entry and working alone, excavations, 328
 - equipment
 - general construction, 194
 - machinery and material
 - flashing devices and, 220
 - materials storage, 212
 - moving materials, 212
 - personal protective equipment, 194
 - protective clothing, and devices, 194
 - excavations, 328
 - defined (excavation), 184
 - entry and working alone, 328
 - facilities for workers, 343
 - first aid, 344
 - general requirements, 331
 - interpretation and application, 328
 - level areas and, 331
 - precautions concerning services, 330
 - protection of adjacent structures, 330
 - shoring and timbering, 332, 336
 - soil types, 329
 - support systems, 331
 - unattended machines, 235
 - walls of site, 331
 - water and, 331
 - width of, 333
 - work space and, 331
 - explosive actuated fastening tool
 - explosive loads and, 245

- firing prevention, 245
- inspecting before use, 244
- locking parts, 245
- protective guard and, 244
- storing, 245
- to be operable, 245
- training and, 244
- velocity of fastener firing, 244
- explosives
 - blasting circuits, 363
 - blasting mats and, 322
 - drill holes and, 323
 - electric blasting caps, 322
 - firing cables or wires, 362
 - firing electrically, 362
 - flames and fire near, 322
 - general construction, 321
 - handling, transporting and use of, 322
 - non-sparking tool and, 324
 - original wrapper and, 322
 - security of, 322
 - shafts, tunnels, caissons or cofferdams, 360
 - source of current for blast, 362
 - transporting, 361
 - tunnels and, 360
 - worker in charge, 321
- extension cords, 320
- extension trestle ladder, defined (escabeau coulissant à chevalet), 227
- eye injury risk, protection and, 195
- F
- facilities
 - access to, 205
 - defined (installations), 205
 - documentation required, 206
 - for workers, 343
 - joint health and safety committee and, 206
 - location of, 205
 - portable single units, 209
 - requirements of, 205
 - servicing, cleaning, and sanitizing, 206
 - transportation to, 205
- fall arresters, vertical lifelines and rails, 196
- fall arrest system
 - anchor systems and, 201
 - defects in, 201
 - defined (dispositif antichute), 184
 - full body harness and, 201
 - hitting ground, 201
 - inspection of, 201
 - lanyard or lifeline, 203
 - peak fall force, 201
 - shock absorbers and, 201
 - worker falls and, 201
- falling material, 211
- fall protection system training, 197
- fall restriction equipment for wood pole climbing, 200
- fall restrict system
 - defective findings, 200
 - defined (limiteur de chute), 185
 - inspections and, 200
 - manufacturer instructions and, 200
 - wood pole climbing and, 200
 - worker falls or slips, 200
- falsework
 - and re-shoring, requirements of, 231
 - defined (ouvrage provisoire), 185
 - forms, formwork and re-shoring, 231
 - removal of, 232
- fastening tool, explosive actuated, 244
- fencing and guarding, mechanically-operated machines and, 240
- fines, schedule for, 386

- fire extinguishing equipment
 - inspecting for defects, 218
 - protection from damage and freezing, 217
 - requirements of, 217
 - fire prevention
 - blow torch, welding or cutting equipment, 246
 - protection, 217
 - work in compressed air, 368
 - fire pumps, temporary or permanent, 218
 - fire safety, general construction, 217
 - firing cables or wires, 362
 - first aid, excavation and, 344
 - fittings
 - attachments, slings and containers, 311
 - cylinders and piping, damage protection, 246
 - fixed support
 - defined (support fixe), 185
 - sharp edges and, 202
 - flammable liquid, defined (liquide inflammable), 185
 - flares, highway projects and, 221
 - flashing devices, public way and, 220
 - flashing lights, highway projects and, 221
 - flashlights, tunnels and, 349
 - flooring temporary, 210
 - flotation device or lifejacket, 204
 - footwear, protective, 195
 - fork-lift truck, leaving unattended, 235
 - form, defined (élément de coffrage), 185
 - forms
 - allowable working loads, 231
 - formwork, falsework and re-shoring, 231
 - removal of, 232
 - testing verification, 231
 - formwork
 - and falsework, inspection of, 232
 - defined (coffrage), 185
 - design and placement of, 232
 - design drawings and, 233
 - removal of, 232
 - tie, 212
 - freeway
 - defined (autoroute), 185
 - mobile operations, 222
 - shoulder work, 222
 - friction-type clamps, 312
 - front-end loader, leaving unattended, 235
 - full body harness
 - defined (harnais de sécurité), 185
 - fall arrest system and, 201
 - inspecting, 200
 - lifeline or lanyards and, 203
 - travel restraint systems and, 200
 - fume, gas, vapour or dust mixture with air, 215
- G
- garment requirements, 223
 - gas or flammable liquid storage, 213
 - gas, vapour, dust or fume mixture with air, 215
 - general, 183
 - general equipment
 - application, 194
 - cables, slings, rigging, 308
 - cranes, hoisting and rigging, 282
 - demolition and damaged structures, 325
 - derricks, stiff-leg derricks, and similar hoisting, 306
 - dust control, 219
 - egress access from work areas, 224

- electrical hazards, 313
 - elevating work platforms, 279
 - equipment, 233
 - explosive actuated fastening tool, 244
 - explosives, 321
 - fire safety, 217
 - general requirements, 210
 - hot tar or bitumen roadtankers, 325
 - housekeeping, 211
 - hygiene, 205
 - ladders, 227
 - multi-point suspended scaffolds, 274
 - platforms, runways and ramps, 225
 - protective clothing, equipment and devices, 194
 - public way protection, 219
 - roofing, 324
 - rotary foundation drill rigs, 288
 - scaffolds and work platforms, 246
 - stairs and landings, 225
 - suspended platforms, scaffolds and boatswain's chairs, 251
 - temporary heat, 216
 - tower cranes, 296
 - traffic control, 220
 - welding and cutting, 246
 - generic installation drawing
 - defined (dessin d'installation générique), 185
 - employer, 268
 - erection and dismantling, 276
 - installation, 266
 - preparation, 268
 - guarding and fencing,
 - mechanically-operated machines and, 240
 - guardrail system
 - defined (garde-corps), 186
 - elevating work platforms and, 280
 - load resistance, 198
 - openings and, 197
 - specifications, 198
 - stilts and, 242
 - wire rope specifications, 199
 - wooden type specifications, 199
 - guide ropes, 312
- ## H
- hand dryers or paper towels, 209
 - handrail requirements, 226
 - haulage locomotives, 359
 - hazard exposure, 194
 - hazardous conditions, detecting, 193
 - hazards, electrical, 313
 - headwear, protective, 195
 - heating device, fuel-fired, 216
 - helicopter
 - externally-loaded, 307
 - ground personnel and signallers, 307
 - rotor downwash, 307
 - highway
 - defined (voie publique), 186
 - worker protection on, 220
 - hoisting
 - alloy steel chains and, 312
 - derricks, and stiff-leg derricks, 306
 - rigging and cranes, 282
 - hoisting devices
 - assembly, extension, dismantling, 287
 - leaving unattended, 235
 - turntable level, 288
 - hoisting hook, safety catch and, 286, 311
 - hoisting operations
 - inspector notification, 287
 - shafts and, 348
 - hoistways

- buckets and, 357
 - cages or cars, 356
 - hoisting apparatus and, 353
 - hoist operators and, 353
 - landings and, 352
 - skips and, 358
 - supervisors and, 353, 354
 - transporting workers, 356
- hook block, 312
- hooks as work places, 240
- horizontal or vertical lifelines, 203
- horsepower, mechanically
 - powered vehicles, etc., 234
- hose outlets, standpipe and, 218, 219
- hoses, whip prevention, 241
- hot-tapping pipelines, 216
- hot tar or bitumen roadtankers, 325
 - operation of, 325
- housekeeping, general
 - construction, 211
- hydraulic support system, defined (système de soutien hydraulique), 328
- hygiene, general construction, 205
- I
- inspections
 - frequency of, 193
 - record availability, 194
- instructions, restrictions and hazards, 287
- internal combustion engine
 - operation, 215
- J
- joint health safety committee
 - emergency procedure reviews and, 194
 - facilities and, 206
- K
- kilopascals, defined (kilopascals), 364
- L
- labour and materials, cost of, 190
- ladders
 - as means of access, 229
 - barrels, boxes, loose objects and, 241
 - design, construction, and maintenance, 227
 - general construction, 228
 - requirements for access types, 230
 - wooden, 228
- landings and stairs, 225
- land requirements, tunnels, etc., 339
- lane control devices, highway
 - projects and, 221
- lane work, identifying, 222
- lanyard or lifeline, travel restraint system and, 203
- leg extensions and stilts, 241
- lifejacket or flotation devices, 204
- lifting jacks, 241
- light bulb, enclosure of, 215
- lighting
 - compressed air work, 369
 - lighting and electrical supply tunnels and, 360
- loading and unloading vehicle, machine or equipment, 235
- load resistance, guardrails and, 198
- loads
 - as work places, 240
- lockout, 316
- lock tender
 - increase or decrease air pressure, 382
 - information recording, 383

- observing decompression sickness, 382
 - requirements of, 381
 - supervising controls, 381
 - lock tenders, 381
 - longitudinal buffer area
 - defined (zone tampon longitudinale), 186
 - highway projects and, 221
- M**
- machinery or equipment
 - inspection, 193
 - material and flashing devices, 220
 - magazine, defined (dépôt d'explosifs), 186
 - masonry units, scaffold platforms and, 248, 251
 - material
 - and methods, alternatives, 190
 - equipment moving, 212
 - equipment storage, 212
 - falling, 211
 - flashing devices and, 220
 - piles or stack requirements, 212
 - storage safety, 241
 - maximum air pressure, defined (pression d'air maximale), 364
 - mechanically-powered vehicles,
 - machine tools and equipment horsepower, 234
 - medical lock
 - defined (caisson de décompression), 364
 - work in compressed air and, 372
 - medical requirements,
 - compressed air and, 369
 - metal bands, removal, 212
 - metal trench-jacks, 338
 - methods and materials
 - alternatives, 190
 - mobile operation, defined (travaux mobiles), 220
 - move, defined (déplacer), 236
 - multi-point suspended platform
 - constructor copies, 277
 - defined (plateforme de travail suspendue multipoint), 186
 - designing, 274
 - erecting and dismantling, 276
 - written records, 279
 - multi-tiered load
 - defined (charge superposée), 236
 - requirements, 236
- N**
- National Standards of Canada (CAN), 189, 196, 200, 279
 - non-destructive test
 - component table, 259
 - defined (essai non destructif), 186
 - non-sewered flush toilet facilities,
 - defined (installations de toilettes à chasse non raccordées à un réseau d'égouts), 206
 - notice requirements, 190
 - notices, registration and, 190
- O**
- o/c, defined (c. à c.), 335
 - Oil, Gas and Salt Resources Act, 184
 - one lane traffic direction, 223
 - Ontario College of Trades and Apprenticeship Act, 283, 294, 313
 - operators manual, elevated work platform and, 282
 - operator's station, vehicle,
 - machine or equipment, 234

outrigger scaffold, 248, 251
 distance, 251
 overhauling weight, 312
 overhead protection, 211

P

panel boards, 320
 personal protective equipment,
 194
 Personnel and Debris Nets, Safety
 Requirements for, 202
 piles and sheet piling, 313
 pilots
 hoisting helicopter, 307
 hoisting method decisions, 307
 pipeline
 hot-tapping, 216
 repair or alteration, 216
 piping, damage protection, 246
 platforms
 allowable unit stresses, 246
 as workplaces, 240
 requirements, 225
 runways, and ramps, 225
 slope gradient, 225
 stairwells and, 225
 portable urinals, 209
 post, defined (montant), 335
 potable drinking water, 205
 power supply, tagging, 316
 prefabricated support system,
 defined (système de
 soutien préfabriqué), 328
 pressure, defined (pression), 328
 procedures
 defined (procédures), 236
 varying, 190
 professional engineer
 trench design and, 191
 projects, director designation of,
 190
 propane storage, 213
 protection, public way, 219

public way
 defined (passage public), 186
 directing traffic, 221, 222, 223
 fences and, 220
 flashing devices and, 220
 protection, general construction,
 219

R

radio, two-way, access to, 194
 rails, top and intermediate, 198
 ramps
 platforms, and runways, 225
 requirements, 225
 rated platform capacity, defined
 (capacité nominale de la
 plateforme), 186
 record of compressed air worker,
 370
 registration and notices, 190
 registration forms, prior to project,
 190
 reinforcing steel, installing, 249
 replacement parts, 234
 rescue of workers
 equipment, providing, 204, 345
 falls and, 197
 tunnels, shafts, etc., 344
 water and, 204
 rescue operation alarm system,
 205
 re-shoring
 design of, 231
 forms, formwork and falsework,
 231
 retro-reflective requirements,
 garments, 223
 reusable materials, 211
 reverse, operating vehicles,
 machines and equipment
 in, 238
 rigging
 components, removal of, 212

- hoists and cranes, 282
- slings, cable, 308
- roadtankers, hot tar or bitumen, 325
- roadway, defined (chaussée), 186
- rolling work platform, elevating, 279
- roofing
 - counterweights and, 324
 - general construction, 324
 - hoists and, 324
 - hot tar or bitumen pipe, 325
 - repair or resurface, 324
- rotary foundation drill rigs
 - defined (foreuse rotative pour fondations), 187
 - drilling, prior to, 288
 - employer requirements, 292
 - inspections, 288
 - training, 293
 - worker requirements, 294
 - written report, 289
- rubber gloves, electrical hazards and, 319
- runways
 - ramps, and platforms, 225
 - requirements, 225

S

- safety
 - belt, defined (ceinture de sécurité), 187
 - catch, hoisting hook and, 311
 - chains, cages, use with tire inflation, 240
 - factor, defined (coefficient de sécurité), 187
 - hat requirements, 195
 - net, 202
- safety net
 - defined (filet de sécurité), 187
 - design testing, 202
 - inspection of, 202

- installation of, 202
- Safety Requirements for Personnel and Debris Nets, 202
- sanitation, work in compressed air and, 369
- scaffold
 - altered, erected dismantled or, 249
 - and work platforms, 246
 - barrel, box, loose object and, 241
 - boatswain's chairs and
 - suspended platforms, 251
 - design and construction of, 246
 - erection, alteration, and dismantling, 249
 - mounted on castors or wheels, 248
 - multi-point suspended, 274
 - professional engineers and, 248
 - requirements, 247
 - requirements of, 249
 - scaffold platform masonry units and, 248
 - stilts and, 242
 - testing components, 247
 - work area platform and, 224
- schedule 67, 386
- schedule 67.1, 396
- schedule for fines, 386
- screen or cab, as protection, 234
- self-erecting tower crane
 - defined (grue à tour à montage autonome), 187
 - inspection by engineer, 299
- self-propelled elevating work platforms, 279
- self-rescue respirator, 346
- self-retracting devices for personal fall-arrest systems, 196
- service, defined (entretenir), 205
- service shaft, defined (puits de service), 187
- services, precautions concerning,

- 330
- sewered toilet facilities, 208
- shafts
 - access to egress, 351
 - barriers and, 351
 - construction of, 349
 - conveyances and, 352
 - defined (puits), 187
 - hoist operators and, 348
 - ice and loose objects, 351
 - ladders and, 351
- shafts, tunnels, caissons and cofferdams, 339. See also tunnels, shafts, caissons and cofferdams
- sheathing, defined (blindage), 187
- shock absorbers, fall arrest systems and, 201
- shoring and bracing shafts, 350
- short forms and terms, 189
- shovel, backhoe or excavating machine, load passes and, 235
- signallers
 - assistance from, 238
 - communication and, 240
 - garment requirements and, 239
 - training and instructions, 239
- sign requirements, traffic direction and, 222
- signs
 - posting of, 214
 - traffic directing requirements, 222
- sign trucks
 - defined (camion de signalisation), 187
 - highway projects and, 221
- site-specific installation
 - drawing, defined (dessin d'installation propre au site), 188
- skeleton steel stairs, 227
- skin injury risk, protection and, 195
- slings, cables, rigging, 308
- SLOW sign, traffic direction and, 223
- soap and hand cleanser, 209
- soil types, excavation and, 329
- speed control devices, highway projects and, 221
- stairs and landings
 - allowable unit stresses, 226
 - handrails and, 226
 - requirements of, 226
 - width requirements, 226
 - work requirements and, 226
- standpipes
 - disconnecting temporary, 218
 - floor plans and, 219
 - maintaining temporary, 218
 - temporary or permanent, 218
 - valves and, 218
- steel columns or structural steel beams, 210
- step-ladder, defined (escabeau), 227
- stiff-leg derricks, derricks, and similar hoisting, 306
- stilts
 - guardrails and, 242
 - leg extensions and, 241
 - manufacturing of, 242
 - storing, 243
 - training and instruction, 243
 - work surfaces and, 242
- STOP signs, traffic direction and, 223
- storage cylinder, control valve and, 213
- structural alteration or erection of, forms, 190
- structures
 - demolition and damaged, 325
 - protection of adjacent, 330
- strut, defined (étais), 188
- suitable, defined (convenable),

188
superintendent, defined
 (surintendant), 364
supervisors, appointing, 193
support chains, removal, 212
support systems
 excavations, 331
 fabrication of, 332
 hydraulic supports and, 333
 installing, 333
 ladders and egresses, 338
 metal trench-jacks and, 338
 removing, 338
 sheathing and, 335
 site specifications and, 331
 struts and, 335
 timbering and shoring, 332
 vehicle and pedestrian traffic
 and, 338
 wales and, 335
suspended platforms
 boatswain's chairs, 251
 body harnesses and, 248, 272
 multi-point suspended, 274
 notification requirements, 192
 requirements of, 264
 scaffolds, 246
 system, defined (système de
 plateformes de travail
 suspendues), 188
switch and panel boards, 320

T

tank, drum, pipeline or container
 repair or alteration, 216
Technical Standards and Safety
 Act, 2000, 313, 372
telephone access, 194
temporary fixed support
 requirements, 201
temporary heat, general
 construction, 216
temporary structures, 210

ten millimetres gap, defined (écart
 de 10 millimètres), 335
tire inflation, safety chains and
 cages with, 240
toe boards, 198
toilet facilities, 207
toilets, number per worker, 208
tower cranes
 able to slew freely, 304
 defined (grue à tour), 188
 general construction, 296
 inspection requirements, 302
 manufacturer's report, 305
 operator's cabin, 304
towing, means of attachment and,
 235
toxic, combustible or corrosive
 substance, containers, 213
traffic
 directing on public way, 222
 protection plan, 221
traffic control
 general construction, 220
traffic direction
 highway projects and, 221
 night-time hours, 224
 one lane, 223
 speed limits and, 223
 worker garments and, 223
training, fall protection system
 and, 197
travel restraint system
 defined (limiteur de
 déplacement), 188
 lanyard and lifelines, 203
traverse, defined (déplacement
 horizontal), 188
trench
 defined (tranchée), 188
 designing of, 191
 notice to ministry, 192
tunnel equipment
 air inlet, 360
 equipment track, 360

- haulage locomotives, 359
- internal combustion engines, 360
- tunnelling operations, rescue training and, 345
- tunnels
 - construction of, 191
 - construction projects and, 358
 - defined (tunnel), 188
 - space requirements, 358
 - support and, 359
 - water and, 359
- tunnels, shafts, caissons and cofferdams, 339
 - application, 339
 - change rooms, 343
 - code of signals, 348
 - combustible equipment and, 343
 - communications and, 346
 - electrical pumps and tools, 349
 - emergency lighting, 349
 - explosives and, 360
 - facilities for workers, 343
 - fire alarms, 341
 - fire protection, 341
 - fire suppression systems, 341
 - first aid, 344
 - flammable liquids or gas, 342
 - flashlights and, 349
 - heated rooms, 343
 - hoistways, 352
 - hoses and, 341
 - land requirements, 339
 - lighting and electricity supply, 349
 - notice, 339
 - oil usage and, 343
 - rescue of workers, 344
 - shafts, 349
 - standpipes and, 341
 - tunnel equipment, 359
 - tunnels, 358
 - ventilation, 363
 - working alone and entry, 340
 - two-way radio access, 194
- U
- underground, defined (souterrain), 188
- Underwriters' Laboratories of Canada, 217, 325, 341
- urinals, portable, 209
- V
- vapour barriers, installation of, 242
- vapour, gas, fume or dust mixture with air, 215
- vehicle-mounted aerial device, 279
- vehicles
 - defined (véhicule), 189
 - electrical hazards and, 315
 - maintenance, 233
 - operating in reverse, 238
 - operation, worker competence and, 234
 - traffic hazards, 220
- ventilation
 - mechanical, 363
 - natural or mechanical means, 215
 - testing of, 363
 - tunnels and, 363
 - underground requirements, 363
 - vertical or horizontal lifelines, 203
 - vests as traffic direction garment, 224
- W
- wale, defined (raidisseur), 189
- warning signs, highway projects and, 222
- wash basins, 209
- waste disposal receptacles, 209
- waste materials, 211
- welding
 - compressed gas cylinder and,

246

fire prevention, 246

general construction, 246

wire rope

guardrails, 199

removal, 212

used on a crane or other hoisting
device, 308

wooden guardrail specifications,
199

work and rest periods, 380

work area route and scaffold
platform maintenance, 224

work belt, defined (ceinture de
travail), 189

work chamber

air locks and, 374

defined (chambre de travail), 364

worker protection, highway
projects and, 220

worker rescue, 204, 344

working alone and entry
excavation, 328
tunnels, etc., 340

work platforms

boatswain's chairs and, 251

defined (plateforme de travail),
251

elevating, 279

scaffolds and, 246

REGULATION 860 - WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM

- A
 - laboratory samples and, 413
 - preparing safety data sheets, 413
- application, 404
- B
 - exemption from clauses, 405
 - explosives, 404
 - Explosives Act (Canada), 404
- biological and chemical agents,
 - assessment of, 404
- bulk shipment, defined (expédition en vrac), 401
- business information, confidential.
 - See confidential business information
- C
 - CAS registry number
 - defined, 401
 - information, business confidential, 413
 - clauses, exemptions from, 405
 - confidential business information
 - claims and procedures, 413
 - exemption from disclosure and, 413
 - container
 - defined (contenant), 401
 - supplier labels and, 407
 - cosmetics, device, drug or food, 404
- D
 - Dangerous Goods Transportation Act (Ontario), 405
 - decanted products, labels for, 409
 - disclosures
 - medical professionals, 415
 - toxicological data, 416
- E
 - education, worker, 405
 - employer-produced hazardous product, 405
 - employer safety data sheets
 - laboratory samples and, 413
 - preparing safety data sheets, 413
 - exemption from clauses, 405
 - explosives, 404
 - Explosives Act (Canada), 404
- F
 - Food and Drugs Act (Canada), 404
 - fugitive emission
 - defined (émission fugitive), 401
 - worker education and, 406
- H
 - hazard information, defined (enseignements sur les dangers), 401
 - hazardous materials, designation of, 404
 - Hazardous Materials Information Review Act, 415
 - hazardous product
 - defined (produit dangereux), 401
 - storing without data sheet or label, 405
 - Hazardous Products Act (Canada)
 - employer safety data sheets and, 413
 - Hazardous Products Regulations (Canada), 415
 - Hazardous Products Regulations (Canada), 402, 403
 - biological and chemical agents, 404
 - defined, 402
 - laboratory samples and, 411
 - supplier labels and, 407
 - supplier safety data sheets and, 413
 - hazardous waste
 - application and, 405
 - defined (résidu dangereux), 402

I	implementation, 406
identifiers, placard, 410	R
L	research and development, defined (recherche et développement), 403
labels	S
controlled product in piping systems, 409	safety data sheet
decanted products, 409	defined (fiche de données de sécurité), 403
defined (étiquette), 402	employer safety data sheets, 413
employer-produced products, 408	supplier safety data sheets, 412
laboratory samples, 410	safe use, storage, handling and disposal of a hazardous product (worker education), 406
defined (échantillon pour laboratoire), 402	sample products, labels and, 411
disclosure requirements, 411	significant new data
no label required, 410	defined (nouvelles données importantes), 403
sample products and, 411	safety data sheets, 413
supplier labels, 410	supplier labels, 407
workplace labels, 412	supplier labels
M	alterations, 407
manufactured article, defined (article manufacturé), 402	container labels and, 407
medical emergencies, information disclosure, 415	containers without labels, 407
medical professional, defined (membre d'une profession médicale), 402	defined (étiquette du fournisseur), 403
P	receiving bulk shipments, 407
Pest Control Products Act (Canada), 404	replacement, 407
piping systems, identification of a hazardous product, 409	supplier safety data sheet
placard identifiers, 410	defined (fiche de données de sécurité du fournisseur), 403
product identifier, defined (identificateur du produit), 402	supplier safety data sheets
products, employer-produced (labels), 408	different formats, 412
program, development and	exemptions, 412
	updates, 412

- T
 - tobacco product, assessment of, 404
 - Transportation of Dangerous Goods Act, 1992 (Canada), 405
- V
 - vessels, identification of a hazardous product, 409
- W
 - wood product, assessment of, 404
 - worker education
 - emergency procedures, 406
 - program, 406
 - requirements of, 406
 - safe use, storage, handling and disposal of a hazardous product, 406
 - workplace hazardous materials information system (WHMIS)
 - application, 404
 - assessment of biological and chemical agents, 404
 - confidential business information, 413
 - definitions, 401
 - designation of hazardous materials, 404
 - disclosure of information in medical emergencies, 415
 - disclosure of source of toxicological data, 416
 - identification of a hazardous product in piping systems and vessels, 409
 - labels, 407
 - laboratory Samples, 410
 - safety data sheets, 412
 - transition, workplace labels, 410
 - worker education, 405
 - workplace labels
 - decanted products, 409
 - defined (étiquette du lieu de travail), 403
 - employer-produced products, 408
 - portable container, 409

REGULATION 1101 - FIRST AID REQUIREMENTS

- A
 - records and, 420
 - requirements, 420
 - room, 423
 - station requirements, 419
 - transportation, construction, farm and bush sites, 424
- B
 - first aid box
 - accessibility of, 419
 - content requirements, 419
 - inspecting, 420
 - item requirements, 419
 - items required, 420
- C
 - construction, repair or demolition, 425
 - first aid room
 - accessibility to, 424
 - furnishings and, 423
 - instrument requirements, 423
 - registered nurses and, 424
 - room requirements, 423
- D
 - denatured ethyl alcohol, 423
 - dressings, first aid room and, 423
 - first aid station
 - accessibility of, 419
 - content requirements, 419
 - employers and, 420
 - furnishings of, 420
 - general contractors and, 425
 - notice boards and, 419
 - station requirements, 419
 - workers in charge, 419
- E
 - employees
 - 15 to 200 employees, 422
 - five to 15 employees, 421
 - five workers or less, 420
 - more than 200 workers, 423
 - requirements, 420
 - employers
 - employment, places of, 425
 - expenses, first aid related, 420
 - first aid stations and, 420
 - Form 82, posting of, 419, 420
 - furnishings, first aid rooms and, 423
 - furnishings, first aid stations and, 420
- F
 - farm workers, 424
 - first aid
 - expenses of, 420
 - receiving treatment, 420
- G
 - general contractors, providing first aid stations, 425

- I
 - transportation, construction, farm and bush sites, 424
 - inspections, 420
 - inspections, first aid boxes and, 419
 - transporting goods, workers and, 426
 - instrument requirements, 423
 - treatment, posting and, 420
- N
 - vehicles, used for transport, 425
 - notice boards, first aid station and, 419
 - W
 - nurses, first aid room and, 424
 - workers
 - charge of station and, 419
 - first aid requirements, 420
 - heavy construction, 426
 - transporting goods, 426
- P
 - power units, 427
- R
 - record keeping, 420
 - registered nurses, 424
- S
 - services, expense responsibility, 420
 - stations, first aid
 - first aid box, 419
 - location of, 419
 - notice boards, 419
 - workers and, 419
 - St. John Ambulance First Aid Certificate, 421, 422, 424
 - St. John Ambulance First Aid Manual, 420, 421, 422, 423, 425, 426
- T
 - time office, construction sites and, 425

**REGULATION 833 - CONTROL OF EXPOSURE TO
BIOLOGICAL OR CHEMICAL AGENTS**

- A
- ACGIH, defined (ACGIH), 431
 - ACGIH Table
 - defined (tableau de l'ACGIH), 431
 - simple asphyxiant, 435
 - Acrylonitrile, 440
 - Actinolite, 440
 - Adopted Values (table), defined, 431
 - airborne concentrations
 - air sampling, 435
 - expressed as, 455
 - health effects, formula for, 456
 - short-term exposures, 456
 - airborne measurement and calculation of exposure, 455
 - airline respirator, defined (appareil de protection respiratoire à adduction d'air), 431
 - air sampling, 455
 - air sampling method, 435, 455
 - Alkyl compounds of, as Hg, 447
 - American Conference of Governmental Industrial Hygienists, 431
 - Amosite, 440
 - Anhydrous, lithium hydroxide, 447
 - Anthophyllite, 441
 - Arsenic, 440
 - Asbestos
 - Actinolite, 440
 - All forms, 440
 - Amosite, 440
 - Anthophyllite, 441
 - Crocidolite, 441
 - Tremolite, 441
 - asphyxiants, simple, 435
 - atmospheric oxygen, 435
- B
- Benzaldehyde, 441
 - Benzene, 441
 - biological agents, control of exposure, 431
 - airborne concentrations and, 455
 - personal protective equipment and, 434
 - skin absorption, 435
- C
- defined (C), 431
 - exceeding exposure, 434
 - Calcium chloride, 441
 - Carbon tetrachloride, 441
 - ceiling limit, defined (valeur C, valeur plafond), 431
 - Charcoal, except activated, 441
 - chemical agent, defined (agent chimique), 431
 - chemical agents, control of exposure
 - airborne concentration and, 435
 - health effects, formula for, 456
 - personal protective equipment and, 434, 437
 - skin absorption, 432
 - Chlorodiphenyl (42 per cent chlorine), 441
 - Chlorodiphenyl (54 per cent chlorine), 442
 - Chrysotile, 441

- Coke Oven Emissions, 442
- Continuous filament glass fibres, 451
- Coumarone-Indene Resins (total dust), 442
- Cristobalite, 450
- Crocidolite, 441
- Cymene, 442
- D
- Designated Substances, 433, 434
- Di(2-ethylhexyl)phthalate (DEHP), 442
- Dichloro-2-Propanol, 1,3-, 442
- Dichloroethene, 1,1-, 442
- Diethylene glycol monoethyl ether, 442
- Diisodecyl phthalate, 442
- Dimethyl 2,3,5,6-tetrachloroterephthalate, 443
- Dimethylamino propylamine, 3-, 442
- Dimethyl terephthalate, 443
- Dipropylene glycol monomethyl ether acetate, 443
- Diquat, 443
- E
- employer
 - atmospheric oxygen levels, 435
 - measures to protect workers and, 434
 - personal protective equipment requirements, 434
 - simple asphyxiants, 435
 - endnotes and abbreviations, 454
- Enflurane, 443
- Ethyl-3-ethoxy propionate, 443
- Ethylene dibromide, 443
- Ethylene glycol dimethyl ether, 443
- Ethylene glycol mononitrate, 444
- Ethylene glycol mono-n-propyl ether, 444
- Ethylene oxide, 444
- Ethyl methacrylate, 444
- excursion limits, 434
- exposure, defined (exposition), 432
- exposure to hazardous agent employer safety measures, 434
- personal protective equipment and, 434
- F
- Flour dust, 444
- Forane, 444
- Formaldehyde, 444
- G
- Glass wool fibres, 451
- H
- Halothane, 444
- handling of hazardous agents, 434
- hardwoods as beech and oak (wood dust), 454
- health, affected by exposure, 436
- Heptyl acetate, 444
- Hexamethylene diisocyanate (HDI), 445
- Hexamethylenetetramine (HMT), 444

Hexamethyl phosphoramidate, 444

Hexyl acetate, 444

Hydrogenated terphenyls, 445

Hydrogen sulfide, 445

I

inorganic and organic

compounds of lead, 446

compounds of mercury, as Hg,
447

inorganic compounds, 440, 446

Insoluble compounds, as Ni, 448

Isocyanates, organic compound,
446

Isophorone diisocyanate (IPDI),
445

Isopropylaminoethanols, 446

Isosorbide dinitrate, 446

L

Lead

chromate, 447

elemental, 446

Tetraethyl, 446

Lincomycin, 447

Lithium hydroxide

anhydrous, 447

monohydrate, 447

M

Manganese, 447

Mercury

Alkyl compounds of, 447

elemental, 447

Methoxyflurane, 447

Methylene bis(2-chloroaniline)

(MBOCA; MOCA), 4,4', 448

Methylene bisphenyl isocyanate
(MDI), 445

Methylene dianiline, 4,4', 448

Methyl n-amyl ketone, 448

Methyl n-butyl ketone, 448

Methyl tert-butyl ether (MTBE),
448

Mineral Spirits, 448

N

N-Cocomorpholine, 442

Nepheline syenite (total dust), 448

Nickel Elemental/metal, 448

Nickel Insoluble compounds, as
Ni, 448

Nickel Soluble compounds, as Ni,
448

Nickel subsulfide, as Ni, 449

Nitrous oxide, 449

N-Methyl-2-pyrrolidone, 448

N, N-Dimethyl-cyclohexylamine,
443

N, N-Dimethyl-ethanolamine, 443

N-Nitrosamines, including n-Nitro-
sodimethylamine, 449

O

o-Chlorobenzaldehyde, 441

Ontario Table

defined (tableau de l'Ontario),
432

exposure to agents listed, 434

skin absorption of agent, 435

Ontario Table of Occupational
Exposure Limits, 440

- o-Tolidine, 453
- Ozone, 449
- P
- Paraquat, 449
- Particles (Insoluble or Poorly Soluble) Not Otherwise Specified (PNOS), 449
- Penicillin (total dust), 449
- Pentaerythritol tetrabenzoate, 449
- personal protective equipment, employer provided, 434
 - use of, 435
- Petroleum coke (total dust), 449
- Phenoxyethanol, 2-, 449
- Platinum
 - metal, 449
 - water-soluble, 450
- Polychlorinated biphenyls (PCBs), 450
- Poultry dust (total dust), 450
- Propylene glycol, 1,2-, 450
- Propylene glycol monomethyl ether acetate, 450
- Protection Program Respirators, 436. See also Respiratory Protection Program
- Q
- Quartz/Tripoli, 450
- R
- Refractory ceramic fibres, 452
- Respiratory Protection Program, 436
 - Employer duties, 436
 - Maintenance, 439
 - Requirements, 437
 - Respirator use, 439
 - Rock wool fibres, 452
- S
- Selenium hexafluoride, as Se, 450
- Shellac dust (total dust), 450
- short-term exposure limit, defined (limite d'exposition à court terme), 433
- Silica, Crystalline cristobalite, 450
- Silica, Crystalline quartz/tripoli, 450
- Silica fume, 450
- Silica fused, 450
- Silicon carbide Fibrous, 451
- Silicon carbide Non-fibrous, 451
- simple asphyxiant, 435
- Sisal dust (total dust), 451
- skin absorption, protection from, 435
- Slag wool fibres, 452
- Soap dust, 451
- Special purpose glass fibres, 452
- Spectinomycin, 451
- STEL
 - defined (LECT), 433
 - exceeding exposure, 434
- Stoddard Solvent 140°F Flash
 - Aliphatic Solvent, 451
- storage of hazardous agents, 434
- Styrene - monomer, 451
- Sulfur dioxide, 451
- Synthetic Vitreous Fibres
 - continuous filament glass fibres,

451

glass wool fibres, 451
not otherwise classified, 452
refractory ceramic fibres, 452
rock wool fibres, 452
slag wool fibres, 452
special purpose glass fibres, 452

T

Talc, 452
Tellurium hexafluoride, as Te, 453
Tetrachlorophthalic anhydride,
453
Tetrachlorophenol, 453
Tetraethyl lead, as Pb, 446
Tetrasodium pyrophosphate, 453
Threshold Limit and Biological
Exposure Indices, 431
time-weighted average limit,
defined (limite moyenne
pondérée dans le temps),
433
Tin, as Sn, 453
Toluene diisocyanate (TDI), 445
Tremolite, 441
Triethanolamine, 453
Triethylenediamine, 453
Triethylenetetramine, 453
Trimethoxyvinylsilane, 454
Trixylylphosphate, 454
TWA
defined (LMPT), 433
exceeding exposure, 434

V

Vinyl chloride, 454

W

Wheat flour dust (total dust), 454
Wood dust
beech and oak, 454
Softwood, 454
worker
health affected by exposure, 436

REGULATION 632/05 - CONFINED SPACES

A

acceptable atmospheric levels, defined (niveaux atmosphériques acceptables), 461

adequate, defined (adéquat), 461

adequately, defined (adéquatement), 462

application, confined spaces, 463

assessment, confined space, 465

appointing a person, 466

defined (évaluation), 462

hazard assessment before worker entry, 465

incorporated in entry permit, 466

providing copies, 466

recorded in writing, 465

review of, 466

atmospheric hazards, defined (risque atmosphérique), 462

atmospheric testing, 472

calibrated instruments and, 473

health and safety of workers and, 473

performing tests, 472

recording results, 473

testing prior to worker entry, 473

attendant, confined spaces and, 471

assigned to worker, 471

entering confined spaces, 472

plan and, 466

rescue equipment and methods of communication, 470, 472

C

cold work, defined (travail à froid), 462

confined spaces

application, 463

assessment, 465

atmospheric testing, 472

attendant, 471

defined (espace clos), 462

definitions, 461

entry permits, 469

exceptions, 463

explosive and flammable substances, 473

hazard recognition and other general training, 467

isolation of energy and control of materials movement, 471

means for entering and exiting, 472

multi-employer involvement, 464

on-site rescue procedures, 470

personal protective equipment, 471

plan, 466

plan-specific training, 468

preventing unauthorized entry, 472

program, 464

records, 475

rescue equipment, 470

training-projects, 468

ventilation and purging, 475

co-ordination document, 464

E

emergency work

defined (travail d'urgence), 462

personal protective equipment and, 463

training and, 463

written procedures and, 463

energy, isolation of, 471

plan and, 467

worker protection, 471

entering and exiting

means for, 472

plan and, 467

- entry permits, 469
 - assessments and, 466
 - availability of, 469
 - hazard recognition and, 468
 - included on, 469
 - plan-specific training and, 468
 - training-projects and, 469
 - using separate permits, 469
 - verify relevance with plan, 469
- equipment, rescue, 467
- exceptions, confined spaces, 463
- explosive and flammable
 - substances, 473
 - adding inert gas, 474
 - cold work, 474
 - combustible dust in confined spaces, 473
 - flammable gas or vapour, 473
 - hot work and, 474
 - inspection work and, 473
 - plan and, 467
 - using respiratory equipment, 474
- F
 - firefighters, exceptions and, 463
 - Fire Protection and Prevention Act, 1997, 463
 - flammable and explosive substances, 467, 473
- H
 - hazard assessment, 465
 - hazard recognition and other
 - general training, 467
 - incorporated entry permit, 469
 - joint health and safety committee and, 467
 - training and, 469
 - worker training, 467
 - workplaces that are projects, 468
 - written records, 468
 - hot work, defined (travail à chaud), 462
- J
 - joint health and safety committee
 - assessment and, 466
 - hazard recognition and, 467
 - program and, 464
 - training-projects and, 469
- L
 - lead employer, defined (employeur principal), 462
 - lockout, 471
- M
 - multi-employer involvement, 464
 - co-ordination document, 464
 - health and safety of workers, 464
 - joint health and safety committee and, 464
- O
 - Occupational Health and Safety Act, 463
 - on-site rescue procedures, 470
 - number of persons trained, 470
 - plan and, 467
 - training persons, 470
- P
 - personal protective equipment, 467, 471
 - plan, confined spaces, 466
 - deal with two or more confined spaces, 467
 - defined (plan), 463
 - incorporated into entry permit, 466
 - prior to worker entry, 466
 - provisions for, 466
 - review of, 467
 - plan-specific training, 468
 - workers and, 468

workplaces that are projects, 468
 written records, 469
 program, confined spaces, 464
 copies of, 465
 defined (programme), 463
 entry permit system, 465
 hazard assessment and, 465
 joint health and safety
 committee, 465
 plan development and, 465
 training workers, 465
 written program, 464
 purging
 defined (purge), 463
 plan and, 467
 purging and ventilation, 475

R

records, confined spaces, 475
 hazard recognition and, 468
 plan-specific training and, 468
 rescue equipment and methods
 of communication, 470
 retaining documents, 475
 training-projects and, 468
 workplaces as projects, 476
 related work, defined (travail
 connexe), 463
 rescue equipment, 467
 rescue equipment and methods of
 communication, 470
 availability of equipment, 470
 communicating with attendant,
 470
 inspections and, 470
 rescue procedures, on-site, 470

S

sample, defined (prélèvement),
 473

T

Technical Standards and Safety
 Act, 2000, 463
 test, defined (essai), 473
 training
 general, 467
 plan-specific, 468
 programs and, 465
 training-projects, 468
 hazard recognition and, 469
 incorporated entry permits and,
 469
 joint health and safety
 committee and, 469
 safe work practices and, 469
 workplaces that are projects, 468
 written records, 469

U

unauthorized entry, preventing,
 472
 underwater, work performed, 463

V

ventilation and purging, 475
 atmospheric hazards and, 475
 mechanical ventilation and, 475
 plan and, 467
 respiratory protective equipment
 and, 475

W

worker duties, plan and, 467

**REGULATION 67/93 - HEALTH CARE AND
RESIDENTIAL FACILITIES**

- A**
- adequate, defined (adéquat), 479
 - adequately, defined (adéquatement), 479
 - anaesthetic gases, 509
 - antineoplastic drugs, 509
 - joint health and safety committee and, 509
 - training and instruction, 510
 - autoclave or sterilization machine, 494
- B**
- biohazard identification, 513
 - boatswain's chair, suspended scaffolds and, 504
 - bottles and test tubes, 513
- C**
- Canadian Standards Association, 494
 - centrifuge maintenance and operation, 493
 - Child, Youth and Family Services Act, 480
 - clearance requirements, 492
 - clothing, personal protective equipment and, 482
 - compressed gas cylinders, 498
 - compressed flammable gas, 499
 - posted as no smoking, 499
 - storage cylinders, 498
 - cord-connected electrical equipment, 497
 - cranes, operating near live power lines, 498
- D**
- deep freeze units, material handling and, 513
 - disposal of fluorescent bulbs, 486
 - doors, self-closing, 484
 - drowning hazards, personal protective equipment and, 483
- E**
- electrical equipment, 494
 - cord-connected, 497
 - distance from energized electric conductor, 497
 - electricity conducting materials or equipment, 494
 - exposed energized electrical parts, 495
 - isolating and de-energizing, 497
 - operating cranes, vehicles near live power lines, 498
 - power supply to electrical installations, 495
 - protection from electrical shock, 496
 - requirements for, 494
 - rescue operations, 496
 - tag requirements, 495
 - wet locations and, 497
 - Electrical Safety Authority, 494
 - electrical shock, protection from, 496
 - Electricity Act, 1998, 494
 - emergency stop control, 491
 - equipment, health care and residential facilities and, 490
 - blocking and, 492
 - centrifuge maintenance and operation, 493
 - clearance requirements, 492
 - emergency stop control, 491
 - exposed moving parts, 491
 - glassware and, 493
 - grinding wheel, 493
 - in-running nip hazard, 491
 - inspection after repair or

- modification, 492
- machinery or equipment
 - requirements, 490
- operating control acting as
 - guard, 491
- passing under machinery
 - equipment or material, 492
- repairs, maintenance or
 - adjustments, 492
- worker repairs or altering, 492
- explosion-proof refrigerator, 513
- explosive hazards, 508
- eye protection, 482

F

- fall arrest system, 483
- fixed access ladder, work surfaces
 - and, 489
- flammable liquids, 510
 - container requirements, 510
 - defined, 510
 - dispensing from holding
 - container, 510
 - handling, 510
 - internal combustion engine, 512
 - requiring refrigeration, 513
 - storing, 511
- fluorescent tube disposal, 486
- foot protection, 482

G

- glassware, equipment and, 493
- grinding wheels, 493
- guardrails, work surfaces and, 488

H

- hair, personal protective
 - equipment and, 483
- hazardous room, defined, 484
- head protection, 482
- health care and residential
 - facilities

- anaesthetic gases, 509
- antineoplastic drugs, 509
- compressed gas cylinders, 498
- electrical equipment, 494
- equipment, 490
- explosive hazards, 508
- flammable liquids, 510
- general duty to establish
 - measures and procedures, 481
- heating, 485
- housekeeping and waste, 513
- hygiene facilities, 487
- interpretation and application, 479
- ladders, 501
- lighting, 486
- material handling, 512
- material handling equipment, 499
- personal protective equipment, 482
- premises, 484
- restricted spaces, 490
- scaffolds, 502
- suspended scaffolds, 504
- ventilation, 484
- heating, health care and
 - residential facilities, 485
- horizontal and static lines, 506
- housekeeping and waste, 513
- laundry or janitorial material
 - storage, 513
- liquid hazardous waste
 - containers, 514
- puncture resistant materials, 514
- training, 514
- used needles as waste, 514
- waste material removal, 514
- hygiene facilities, 487
 - food, drink, tobacco or
 - cosmetics, 487
 - potable drinking water, 487
 - privacy spaces, 487

refrigerators, 487
toilets and washbasins, 487

I

incubators, material handling and, 513
in-running nip hazard, 491
internal combustion engine, 512
interpretation and application, health care facilities and, 479
facility types, 479
laundry facilities, 480
measure or procedure variation, 480
plant operation, 480
records or reports, 480

J

janitorial material storage, 513
jewellery, personal protective clothing and, 483
joint health and safety committee
antineoplastic drugs, 509
establishing measures and procedures, 481
heating and, 486
housekeeping and waste, 514

L

Laboratory and Specimen Collection Centre Licensing Act, 479
ladders, health care and residential facilities, 501
maximum length, 501
requirements of, 501
self-supporting units, 502
step stools and, 501
use requirements, 501
laundry facilities, 480
laundry storage, 513

lifelines, suspended scaffolds and, 504
lifting equipment
examination of, 500
inspection of, 492
lighting, health care and residential facilities and, 486
burned-out bulbs, 486
fluorescent tube disposal, 486
glare and, 486
minimum requirements, 486
service and maintenance, 487
video display terminal, 486
liquid hazard waste containers, 514
lockout, 490, 492, 495, 497
Long-Term Care Homes Act, 2007, 479

M

material handling, 512
adequate space for workers, 513
bottles and test tubes, 513
disinfectants and decontaminants, 513
flammable materials requiring refrigeration, 513
incubators, refrigerators and deep freeze units, 513
lifting equipment, inspection of, 492
maximum rated loads, 499
overhead hazard protection, 500
piping systems, 513
platform signs, 500
storage, handling and disposal, 512
suspended platforms, 499
material handling equipment, 499
raise or lowering workers, 499
measures and procedures, general duty to establish, 481

- antineoplastic drugs and, 509
 - health and safety of workers, 481
 - joint health and safety committee, 481
 - review and revision, 482
 - training and education programs, 482
 - variation from, 480
 - Mental Health Act, 479
- O**
- Occupational Health and Safety Act, 480
 - Ontario Building Code, 489
 - outrigger beams, 504, 507
- P**
- patient or resident, defined (malade ou pensionnaire), 479
 - personal protective equipment, 482
 - drowning hazard, 483
 - eye protection, 482
 - falling arrest system, 483
 - foot protection, 482
 - head protection, 482
 - long hair, loose clothing or jewellery, 483
 - slipping hazards, 483
 - training and instruction, 482
 - x-rays and patient support, position or restraint, 483
 - pipng systems, material handling and, 513
 - platform signs, 500
 - potable drinking water, 487
 - power supply to electrical installations, 495
 - premises, health care and residential facilities, 484
 - hazardous room requirements, 484
- self-closing doors, 484
 - warning signs and, 484
 - primary suspension lines, 505
 - Private Hospitals Act, 479
 - Public Hospitals Act, 479
 - puncture-resistant containers, 493, 514
- R**
- refrigerators, material handling and, 513
 - refrigerator usage, 487
 - restricted spaces, 490
 - defined, 490
 - worker entry, 490
- S**
- scaffolds, health care and residential facilities, 502
 - erecting, altering and dismantling, 502
 - mounted on wheels or castors, 503
 - providing for workers, 502
 - requirements of, 502
 - support capability, 502
 - working platform of, 503
 - self-closing doors, 484
 - Services and Supports to Promote the Social Inclusion of Persons with Developmental Disabilities Act, 2008, 480
 - signs, warning, 484, 488, 493, 495, 502
 - slipping hazards, 483
 - static or horizontal lines, 506
 - sterilization and autoclave machine, 494
 - suspended scaffolds, 504
 - boatswain's chair or single-point suspension, 505
 - fall arrest system and, 504

- mechanically and electrically operated equipment requirements, 505
- movable working platforms, 507
- outrigger beams, 507
- primary support line, 506
- primary suspension lines and lifelines, 505
- professional engineers and, 506
- static or horizontal lines, 506

T

- tag requirements, 495
- Technical Standards and Safety Act, 2000, 480
- toilets and washbasins, 487
- training and education programs, 482

V

- vehicles, operating near live power lines, 498
- ventilation, 484
 - health and safety of worker and, 484
 - inspecting, 484
 - inspection report, 485
 - mechanical ventilation system, 485
 - replacement air, 485

W

- warning signs, 484, 488, 493, 495, 502
- washbasins and toilets, 487
- waste material, removal, 514
- water, drinking, 487
- wet processes, work surfaces and, 488
- worker, health and safety of, 481
- work surfaces, 487
 - defined (surface de travail), 479

- finish or materials, 488
- fixed access ladder requirements, 489
- fixed stair or fixed access ladder and, 489
- guardrail design and construction, 489
- guardrails and, 489
- openings in, 489
- reporting to supervisor, 488
- spills of liquid or material, 488
- warning signs, 488
- wet processes and, 488

X

- x-rays and patient position, support or restraint, 483

OTHER REGULATIONS

- A
- absorbed dose, defined (x-ray safety), 522
 - acrylonitrile (designated substances), 647
 - adequate, defined
 - diving operations, 534
 - oil and gas, 600
 - window cleaning, 623
 - adequately, defined (oil and gas - offshore), 600
 - airborne concentrations, measuring (designated substances), 657
 - airborne exposure, duty to limit (designated substances), 650
 - airborne measurement and calculation of exposure (designated substances), 669
 - air kerma, defined (x-ray safety), 522
 - airline respirator, defined (designated substances), 643
 - air-purifying respirator, defined (designated substances), 643
 - air samples (designated substances - asbestos), 711
 - allowable unit stress, defined (window cleaning), 623
 - American Bureau of Shipping, 571
 - American Bureau of Shipping, "Rules For Building and Classing Underwater Vehicles, Systems and Hyperbaric Facilities", 2002., 571
 - analytic X-ray equipment (x-ray safety), 530
 - animal diagnostics and x-ray machines (x-ray safety), 529
 - Application, 537
 - application (diving operations)
 - duties of divers and standby divers, 546
 - duties of diver's tenders, 548
 - duties of diving supervisors, 543
 - duties of employers, constructors, and owners, 538
 - equivalency, 538
 - method of giving notice to the ministry, 538
 - aquarium exhibit diver, defined (diving operations), 534
 - arsenic (designated substances)
 - application, 647
 - defined, 643
 - asbestos
 - application (designated substances), 647
 - asbestos abatement training programs (designated substances - asbestos), 703
 - Asbestos abatement training programs (designated substances - asbestos), 703
 - defined (designated substances), 643
 - defined (designated substances - asbestos), 674
 - workers register (designated substances - asbestos), 704
 - work report (designated substances - asbestos), 703
 - asbestos-containing material, defined (designated substance - asbestos), 674
 - asbestos management, ongoing in buildings (designated substances - asbestos), 679
 - assessment and control program, 652

- assigned protection factor, defined (designated substances), 643
- assistance, medical (diving operations), 563
- atmospheric diving, defined (diving operations), 534
- atmospheric diving system (diving operations)
 - construction and equipment, 571
 - defined, 534
 - interruption of breathing mixture, 559
 - minimum crew, 572
- attenuation, defined (noise), 724
- oxygen supply systems, 561
- primary and secondary breathing mixture supplies, 559
- purity of, 560
- supply lines, surface-supplied diving, 566
- building, defined (designated substance - asbestos), 674
- building owners (window cleaning)
 - duties of, 636
 - inspections and, 637
 - sill work and, 637
 - single-point suspension equipment and, 636
- bulk material samples (designated substances - asbestos), 706

B

- bail-out system, defined (diving operations), 534
- basic occupational health and safety awareness, 593
- benzene (designated substances), 648
- biological, chemical or physical agent exposure (oil and gas - offshore), 606
- board, criteria and matters to consider, 719
- boatswain's chairs (window cleaning), 631
- boom, defined (oil and gas - offshore), 600
- bottom time, defined (diving operations), 534
- breathing mixture (diving operations)
 - compressor requirements, 560
 - containing nitrogen, 560
 - defined, 534
 - emergency reserve and bail-out systems, 560
 - general requirements, 558

C

- Canada Shipping Act, 2001, 611
- Canadian Red Cross, 562
- castor or wheel mounted scaffolds, 630
- cathead, defined (oil and gas - offshore), 600
- cattle farming (farming operations), 586
- C, defined (designated substances), 644
- ceiling limit, defined (designated substances), 644
- Certification of Welding Inspection Organizations, 590
- Certification of Welding Inspectors, 590
- certification training (occupational health and safety awareness and training), 595
- chamber, defined (diving operations), 571
- change (designated substances)
 - defined, 656
 - requiring further assessment,

- 656
 - chassis mounted aerial device
 - (firefighters - protective equipment)
 - defined, 589
 - inspection of, 589
 - chemical, biological or physical agent exposure (oil and gas - offshore), 606
 - Code for Medical Surveillance, defined (designated substances), 644
 - coke oven emission (designated substances)
 - application, 649
 - defined, 644
 - coke oven emissions control program (designated substances)
 - engineering controls, 670
 - hygiene facilities, 672
 - work practices, 671
 - communications (diving operations), 552
 - competency standard for diving, hyperbaric chamber, and remotely operated vehicle operations, 538
 - competent worker, defined (designated substance - asbestos), 674
 - compressed gas storage (oil and gas - offshore), 605
 - compressor requirements, breathing mixtures and (diving operations), 560
 - construction projects
 - notice to the Ministry, 715
 - occupational health and safety awareness and training, 596
 - contaminant, defined (diving operations), 576
 - contaminated environments
 - (diving operations)
 - application, 576
 - equipment, 578
 - identification and precautions, 576
 - surface-supplied diving, 578
 - work zones, 579
 - control program and assessment (designated substances), 652
 - measures to limit exposure to designated substances, 665
 - covers (oil and gas - offshore), 611
 - cranes and hoisting devices
 - diving operations, 554
 - oil and gas - offshore, 606
 - crew minimum (diving operations)
 - s.c.u.b.a., 564
 - surface-supplied diving, 564
 - critical injury, defined, 712
 - CSA Standard (diving operations)
 - defined, 534
 - standards, 538
 - cylindrical object storage (oil and gas - offshore), 605
- D
- daily record (diving operations), 581
 - dairy farming (farming operations), 586
 - dBa, defined (noise), 724
 - decibel, defined (noise), 724
 - decompression (diving operations)
 - defined, 534
 - procédures and tables, 563
 - deep diving (diving operations)
 - defined, 535
 - exposure limits and rest periods, 568
 - general requirements, 567
 - demolition, defined (designated substance - asbestos), 674

- Dentistry Act, 1991, 649
- derrick of mast inspection (oil and gas - offshore), 602
- designated substances
 - airborne measurement and calculation of exposure, 669
 - application, 647
 - assessment and control program, 652
 - coke oven emissions control program – additional elements, 670
 - definitions, 643
 - employer duties, 650
 - exception - construction, 650
 - measuring airborne concentrations, 657
 - medical examinations and clinical tests, 661
 - respiratory protection program, 658
 - variance from a code, 665
- designated substances - asbestos
 - additional measures and procedures, glove bag operations, 693
 - additional measures and procedures, type 2 operations, 691
 - additional measures and procedures, type 3 operations, 695
 - adoption of standard, 677
 - advance notice re Type 3 operations and certain Type 2 operations, 684
 - application, 675
 - asbestos abatement training programs, 703
 - asbestos workers register, 704
 - asbestos work report, 703
 - definitions, 674
 - demolition, 678
 - information for workers, 678
 - instruction and training, 702
 - measures and procedures, type 1 operations, 688
 - measures and procedures, type 2 and type 3 operations, 690
 - notice to inspector, 705
 - ongoing asbestos management in buildings, 679
 - owner's responsibilities before requesting tender or arranging work, 682
 - respirators, 687
 - responsibility of employer other than owner, 681
 - restrictions re sprayed material, insulation, sealants, 677
 - type 1, type 2 and type 3 operations, 684
- Det Norske Veritas, "Rules For Certification of Diving Systems", October 2010, 571
- detonator or explosive storage (oil and gas - offshore), 620
- diesel or gas powered engines (oil and gas - offshore), 612
- direct-reading instrument, defined (designated substances), 644
- disputes (designated substances), 657
- diver, defined (diving operations), 535
- divers and standby divers (diving operations)
 - decompression, 547
 - duties of, 546
 - equipment malfunction or distress, 546
 - flying above dive site, 547
 - personal equipment, 546
 - refrain from diving, 546
 - submersible compression

- chamber attendant, 547
- diver's tenders (diving operations)
 - defined, 535
 - duties of, 548
- dive site (diving operations)
 - defined, 535
 - equipment, 549
- diving equipment (diving operations)
 - communications, 552
 - compressed gas cylinders and, 549
 - cranes and hoisting devices, 554
 - dive site equipment, 549
 - fall arrest systems, 556
 - gauges and metering equipment, 558
 - general, 548
 - hyperbaric chambers, 557
 - lifelines, 551
 - personal diving equipment, 549
 - stages and open (wet bells), 557
 - use in diving operation, 548
 - written material for, 548
- diving operations
 - application, 537
 - breathing mixtures, 558
 - contaminated environments, 576
 - deep diving, 567
 - defined, 535
 - divers and standby divers, duties of, 546
 - diver's tenders, duties of, 548
 - diving records, 580
 - diving supervisors, duties of, 543
 - duties of employers, constructor's and owners, 538
 - equipment, 548
 - equivalency, 538
 - general, 537
 - medical procedures, 561
 - notice to the Ministry, 538, 715
 - schedule 67.2 fines, 584
 - s.c.u.b.a. diving, 563
 - special hazards, 573
 - submersible compression
 - chambers, saturation
 - chambers, atmospheric
 - diving systems and remotely-operated (underwater) vehicles, 569
 - surface-supplied diving, 564
 - diving records (diving operations)
 - daily record, 581
 - diver's logbook, 580
 - dose equivalent
 - defined (x-ray safety), 522
 - dose equivalent (x-ray safety)
 - limits of, 526
 - drawworks (oil and gas - offshore)
 - defined, 600
 - requirements, 620
 - drilling requirements (oil and gas - offshore), 617
 - duties of diving supervisors (diving operations), 543
- E
 - electrical hazards (window cleaning), 634
 - distance requirements, 635
 - exposed energized electrical parts, 634
 - tools, ladders, scaffolding, and other equipment and, 634
 - elevated platforms (oil and gas - offshore), 619
 - emergencies (needle safety), 520
 - emergency lighting (oil and gas - offshore), 611
 - Emergency Management and Civil Protection Act, 520
 - emergency plans (oil and gas - offshore), 601
 - emergency program (designated

- substances), 655
 - emergency reserve, breathing mixtures and (diving operations), 560
 - emergency training, medical procedures and (diving operations), 562
 - employer associated with a diving operation (diving operations), 535
 - employer duties (designated substances), 650
 - employer, responsibilities of designated substances - asbestos), 681
 - employers, supervisors, and workers (window cleaning)
 - appointing a supervisor, 638
 - defective or inadequate equipment, 638
 - safety training program, 638
 - written work plan, 638
 - engineering controls (designated substances)
 - charging, 670
 - coking, 671
 - Environmental Protection Act, 576
 - equipment, diving. *See* diving equipment (diving operations)
 - equipment, miscellaneous (window cleaning)
 - gears, pulleys, and belts, 635
 - hooks, 636
 - ropes or cables, 635
 - equivalent sound exposure level, 724
 - ethylene oxide (designated substances), 649
 - examinations, medical (diving operations), 561
 - examine, defined (designated substances - asbestos), 674
 - exceptions (needle safety), 520
 - exemptions (occupational health and safety awareness and training), 594
 - exits (oil and gas - offshore), 612
 - explosives, as special hazard (diving operations), 575
 - exposure, defined (designated substances), 644
 - exposure limits
 - deep diving and (diving operations), 568
 - designated substances, 665
 - eye injury (oil and gas - offshore), 603
- F**
- failsafe design, defined (x-ray safety), 522
 - failure to protect health and safety, 719
 - fall arrest body harness, defined (window cleaning), 623
 - fall arrest system
 - window cleaning, 623
 - fall arrest systems
 - diving operations and, 556
 - oil and gas - offshore and, 604
 - falling hazard (oil and gas - offshore), 604
 - farming operations, 586
 - application of regulations, 586
 - limitations, joint health and safety committees, 586
 - self-employed, 586
 - fibrous silicates, defined (designated substances - asbestos), 675
 - finer
 - schedule 67.2, 584
 - schedule 67.5, 599
 - fire drill (oil and gas - offshore), 603
 - firefighter, defined (firefighters -

protective equipment), 588
 Firefighters' Protective Clothing for
 Protection Against Heat and
 Flame, 589

firefighters - protective equipment,
 588

exposure to head injury, 588

fire trucks, 590

interior structural fire
 suppression, 588

firefighting and life saving
 equipment (oil and gas -
 offshore), 602

Fire Protection and Prevention Act,
 588, 676

fire protection system (oil and gas
 - offshore), 615

fire trucks (firefighters - protective
 equipment), 590

flame-cutting or welding (oil and
 gas - offshore), 613

flammable liquid, defined (oil and
 gas - offshore), 600

flammable or hazardous material
 storage (oil and gas -
 offshore), 606

foot injury (oil and gas - offshore),
 603

friable material, defined
 (designated substance -
 asbestos), 674

G

gauges and metering equipment
 (diving operations), 558

glove bag operations, measures
 and procedures (designated
 substances - asbestos), 693

gray, defined (x-ray safety), 522

greenhouse farming (farming
 operations), 586

grinding wheels (oil and gas -
 offshore), 607

guardrails, requirements (oil and
 gas - offshore), 610

H

hair confinement (oil and gas -
 offshore), 603

hazardous or flammable material
 storage (oil and gas -
 offshore), 606

hazards, special (diving operations)
 floating equipment, 575

hazardous mechanisms, 575

liveboating, 573

sledding, 574

use of explosives, 575

uxo diving operations, 576

water flow hazards, 575

head injury exposure (oil and gas -
 offshore), 603

Healing Arts Radiation Protection
 Act, 523

health and safety awareness

training — supervisors, 594

health and safety awareness

training — workers, 593

Health Canada, 519

health risks (needle safety), 520

hearing protection devices, 725

helicopters (oil and gas - offshore),
 615

helmets, surface-supplied diving
 and (diving operations),
 566

HEPA filter

defined (designated substances),
 644

HEPA filter, defined (designated
 substance - asbestos), 675

Highway Traffic Act (notices and
 reports under sections 51
 to 53.1 of the Act), 713

hog farming (farming operations),
 586

- hoisting
 - controls (oil and gas - offshore), 609
 - devices and cranes (diving operations), 554
 - ropes, chains, slings or fittings (oil and gas - offshore), 618
 - hollow-bore needles (needle safety), 519
 - Homewood Health Centre Inc., 519
 - homogeneous material, defined (designated substance - asbestos), 675
 - hookahs, surface-supplied diving and (diving operations), 566
 - hygiene facilities (designated substances), 672
 - hyperbaric chamber
 - diving operations and, 557
 - hyperbaric chamber (diving operations)
 - defined, 535
 - Hyperbaric Facilities, 557, 569, 570, 571
- I
- IDLH atmosphere, defined (designated substances), 644
 - in-running nip hazard (oil and gas - offshore), 607
 - inspection
 - diving operations, 542
 - oil and gas - offshore, 603
 - inspector, notice to (designated substance - asbestos), 705
 - Institute of Electrical and Electronics Engineers Recommended Practice for Electrical Installations on Shipboard Standard, 621
- instruction and training (designated substances - asbestos), 702
- isocyanates (designated substances)
 - application, 649
 - defined, 644
 - employer duties, 651
- J
- joint health and safety committees
 - defined (designated substances), 644
 - designated substance - asbestos, 675, 683
 - designated substances and, 653, 655
 - diving operations and, 538
 - exemption from requirements, 721
 - farming operations, 586
- K
- kelly, defined (oil and gas - offshore), 600
- L
- Laboratory and Specimen Collection Centre Licensing Act, 519
 - ladder platforms (oil and gas - offshore), 619
 - ladders and related equipment (window cleaning), 628
 - barrels, boxes, or other loose objects, 629
 - guardrails, 629
 - platform, bucket, basket, load, hook or sling, 629
 - requirements, 628
 - lead (designated substances)
 - application, 649

defined, 644
 life-buoy (oil and gas - offshore), 614
 life jackets (oil and gas - offshore), 604
 lifeline (diving operations)
 defined, 535
 diving operations and, 545
 life rafts (oil and gas - offshore), 614
 life saving and firefighting equipment (oil and gas - offshore), 602
 lifting device (oil and gas - offshore)
 defined, 600
 operation of, 608
 requirements, 608
 lighting, emergency for (oil and gas - offshore), 611
 liveboating (diving operations)
 defined, 535
 special hazards and, 573
 Lloyd's Register, "Rules and Regulations For the Construction and Classification of Submersibles and Underwater Systems", 1989, 571
 locked-out, defined (diving operations), 536
 logbook, diver's (diving operations), 580
 Long-Term Care Homes Act, 2007, 520

M

machine, defined (roll-over protective structures), 640
 machinery, equipment or material securing (oil and gas - offshore), 605

man basket, defined (diving operations), 536
 masks, surface-supplied diving and (diving operations), 566
 mast or derrick inspection (oil and gas - offshore), 602
 materials, articles or things (oil and gas - offshore), 604
 maximum rated load (oil and gas - offshore), 606
 maximum use concentration, defined (designated substances), 644
 mechanically or electrically operated equipment, 631
 medical assistance (diving operations), 563
 medical attention, defined (notices and reports under sections 51 to 53.1 of the Act), 712
 medical examinations and clinical tests (designated substances)
 examination after exposure to acrylonitrile, arsenic, ethylene oxide or vinyl chloride, 662
 personal exposure records, 664
 physician to receive records, 661
 records of medical examinations, 664
 results of examinations and tests, 662
 medical procedures (diving operations)
 decompression procedures and tables, 563
 emergency training, 562
 medical assistance, 563
 medical examinations, 561
 Mental Health Act, 520
 mercury (designated substances)
 application, 649
 defined, 645

- metallurgical coke ovens, defined (designated substances), 645
- metering devices and gauges (diving operations), 558
- mines and mining plants
 - notice to the Ministry, 716
- Mining Act, 601
- mixed gas, defined (diving operations), 536
- monitoring results, posting of (designated substances), 658
- mushroom farming (farming operations), 586
- muster lists (oil and gas - offshore), 602

- N**
- naloxone kits, 727
 - contents of, 728
 - injectable naloxone kit, 728
 - nasal spray kits, 728
 - provision and maintenance of, 727
- needle safety, 519
 - application, 519
 - definition, 519
 - exceptions, emergencies and risks to health, 520
 - provision of safety-engineered needles, 520
 - use of safety-engineered needle, 520
- NIOSH, defined (designated substances), 645
- nitrogen, breathing mixtures containing (diving operations), 560
- non-saturation diving, defined (diving operations), 536
- notices
 - advance re type 3 operations (designated substance - asbestos), 684
 - notice of diving operation (diving operations), 538
 - oil and gas - offshore, 601
 - requirements (notices and reports under sections 51 to 53.1 of the Act), 713
 - to inspector (designated substance - asbestos), 705
 - window cleaning, 624
- notices and reports under sections 51 to 53.1 of the Act - Fatalities, Critical Injuries, Occupational Illnesses and Other Incidents, 712
 - application, 713
 - construction projects and, 712, 715
 - diving operations and, 712, 715
 - electronic form, 718
 - Interpretation, 712
 - mines and mining plants and, 712, 716
 - records, 718
 - section 51 report and section 52 notice, 713
 - section 53.1 notices - additional notices, 717
 - section 53 notices, 714
 - x-ray safety and, 712, 717
- Nuclear Safety and Control Act (Canada), 523
- Nursing Act, 1991, 712

- O**
- observation of, 547
- occupational health and safety
 - awareness and training, 593
 - basic training, 593
 - certification training, 595
 - exemptions, 594

record of training, 595, 598
 required training programs, 596
 schedule 67.5 (fines), 599
 training - period of validity, 597
 working at heights - construction projects, 596
 Occupational Safety Code for Diving Operations, 549
 occupier, defined (designated substance - asbestos), 675
 oil and gas - offshore
 definitions, 600
 general, 601
 general requirements, 603
 preparation, 602
 rigs, 611
 Oil, Gas and Salt Resources Act, 622
 open (wet) bell, defined (diving operations), 536
 operating controls (oil and gas - offshore), 607
 operating manual (oil and gas - offshore), 601
 ordinary worker, defined, 721
 outrigger beams (window cleaning), 633
 owner's responsibilities (designated substance - asbestos), 682
 oxygen supply systems (diving operations), 561

P

personal diving equipment (diving operations), 546
 personal exposure records (designated substances), 664
 physical, biological, or chemical agent exposure (oil and gas - offshore), 606
 pipe, kelly hose, cable or rope (oil

and gas - offshore), 619
 pipe rack (oil and gas - offshore), 619
 poultry farming (farming operations), 586
 powered air-purifying respirator, defined (designated substances), 645
 primary breathing mixture (diving operations), 558
 prime mover, defined (oil and gas - offshore), 600
 principal, conditions and limitations (teachers), 592
 prohibitions, s.c.u.b.a. use (diving operations), 563
 protective clothing (oil and gas - offshore), 603
 protective measures (noise), 725
 Provincial Physician, defined (designated substances), 645
 Public Hospitals Act, 519
 purity of breathing mixtures (diving operations), 560

Q

qualitative fit test
 defined (designated substances), 645
 quantitative fit test
 defined (designated substances), 645

R

radiography or fluoroscopy, industrial (x-ray safety), 527
 record of training (occupational health and safety awareness and training), 598
 records of medical examinations

- (designated substances), 664
- records (oil and gas - offshore), 602
- redundant, defined (x-ray safety), 522
- registration with director (window cleaning), 624
- respirators (designated substance - asbestos), 687
 - table, 707
- respiratory equipment, permitting (designated substances), 651
- rest periods, deep diving (diving operations), 568
- restraining device (roll-over protective structures)
 - defined, 640
 - design, construction, installation, and maintenance, 641
 - machine operation and, 640
 - use on skidders, 640
- restrictions re sprayed material, insulation, sealants (designated substance - asbestos), 677
- rigs (oil and gas - offshore)
 - defined, 600
- rigs (oil and gas-offshore)
 - alarm system, 615
 - alcohol and, 613
 - blow-out prevention system, 622
 - cathead, 617
 - cleanliness and, 612
 - counterweights and, 618
 - diesel or gas powered engines, 612
 - drawworks, 620
 - drilling equipment, 617
 - drilling fluids, 622
 - drilling requirements, 618
 - electrical equipment
 - requirements, 621
 - elevated platforms and, 619
 - emergency lighting, 611
 - emergency storage batteries, 611
 - enclosed workplace exits, 612
 - equipment requirements, 613
 - exits and, 612
 - explosives and detonator storage, 620
 - eyewash station requirements, 607
 - fire protection and detection, 615
 - helicopter use, 615
 - hoisting rope, chain, sling or fitting, 618
 - life-buoys, 614
 - life rafts and, 614
 - living quarters, 616
 - natural lighting, 611
 - personnel transfer baskets and, 616
 - pipe, kelly hose, cable or rope, 619
 - pipe rack requirements and, 619
 - radio communication system, 615
 - requirements of, 613
 - rotary drilling table, 618
 - smoking and, 612
 - stairways, 619
 - survival suits and, 614
 - travelling block, 618
 - walkways and base of derrick ladder, 612
 - well stimulation, 621
- risk of harm, defined (needle safety), 520
- roll-over protective structures
 - defined, 640
 - requirements of, 641
- rotary drilling table (oil and gas - offshore), 618

Rules and Regulations For
the Construction
and Classification of
Submersibles and
Underwater Systems, 571

Rules For Building and Classing
Underwater Vehicles,
Systems and Hyperbaric
Facilities, 571

Rules For Certification of Diving
Systems, 571

S

safety-engineered needle, defined
(naloxone kits), 727

safety-engineered needle (needle
safety)

defined, 519

provision of, 520

use of, 520

safety precautions and
requirements (window
cleaning)

access to and egress from
workplace, 627

age requirements, 626

container requirements, 627

fall protection and, 626

footing requirements, 627

material movement, 628

signage, 627

training, 626

safety training programs (window
cleaning), 638

saturation chamber (diving
operations)

construction and equipment,
570

defined, 536

saturation diving, defined (diving
operations), 536

scaffold, boatswain's chairs, and
related equipment (window

cleaning)

boatswain's chair requirements,
633

emergencies, 634

erection, alteration, dismantling
of scaffolds, 629

outrigger beam, cornice hook,
parapet wall hook, 633

primary suspension line and
lifeline, 632

scaffold requirements, 629

static or horizontal lines, 633

working platform, scaffolds, 630

schedule 67.2 fines (diving
operations), 584

schedule 67.5 fines (OH&S
awareness and training),
599

scientific diving, defined (diving
operations), 536

s.c.u.b.a. diving (diving operations)
defined, 536

diving equipment, 564

minimum crew, 564

prohibitions on use, 563

secondary breathing mixture
(diving operations), 559

self-contained breathing
apparatus, defined
(designated substances),
645

shield, defined (x-ray safety), 522

shielding, defined (x-ray safety),
522

sievert, defined (x-ray safety), 522

silica (designated substances)
application, 649

defined, 645

sill work, defined (window
cleaning), 623

silo, bin, hopper, structure,
container (oil and gas -
offshore), 605

skin injury (oil and gas - offshore),

- 603
- sledding, defined (diving operations), 536
- stage, defined (diving operations), 536
- standard, defined (diving operations), 538
- standard method for workplace air sampling and analysis, defined (designated substances), 645
- Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 589
- standby diver (diving operations) defined, 536
- standby divers, duties of (diving operations), 546
- STEL or short-term exposure limit, defined (designated substances), 646
- St. John Ambulance certification, 562
- submersible compression chamber (diving operations) construction and equipment, 569
- defined, 536
- minimum crew, 572
- suitable, defined (window cleaning), 623
- supply lines, surface-supplied diving and (diving operations), 566
- surface-supplied diving, defined (diving operations), 537
- surface-supplied diving (diving operations) breathing mixture supply lines, 566
- contaminated environments and, 578
- helmets, masks, and hookah, 566
- minimum crew, 564
- SWPF or simulated workplace protection factor, defined (designated substances), 646
- system, defined (diving operations), 571
- T
- teachers, 592
- conditions and limitations, 592
- Technical Standards and Safety Authority, 557
- Testing Fire Department Aerial Devices, 589
- third party workers, duty to (designated substances), 650
- tight-fitting, defined (designated substances), 646
- time-weighted average limit, or TWA (designated substances), 646
- training and instruction (noise), 726
- transmission equipment, defined (oil and gas - offshore), 601
- TWA or time-weighted average limit, defined (designated substances), 646
- type 1 operations (designated substance - asbestos) defined, 675
- measures and procedures, 688
- type 1, type 2 and type 3 operations (designated substance - asbestos), 684
- type 2 and type 3 operations (designated substance - asbestos), 690
- type 2 operation (designated substance - asbestos)

additional measures and procedures, 691
defined, 675
type 3 operation (designated substance - asbestos)
additional measures and procedures, 695
defined, 675

U

umbilical bundle, defined (diving operations), 537
underwater work site, defined (diving operations), 537
university academics and teaching assistants, 722
U.S. Environmental Protection Agency., 677
UXO diving operations (diving operations), 576
defined, 537

V

variance from a code (designated substances), 665
vice-principals, conditions and limitations (teachers), 592
vinyl chloride (designated substances), 650
volunteer worker, defined (joint health and safety committees - exemptions from requirements), 721

W

water control structure, defined (diving operations), 537
water flow hazards (diving operations), 575
welding inspector, (level III firefighters - protective equipment), 590

welding or flame-cutting, 613
welding or flame-cutting (oil and gas - offshore), 613
window cleaning, 623
alternative methods and materials, 624
application, 624
building owner, duties of, 636
definitions, 623
electrical hazards, 634
employers, supervisors, and workers, duties of, 638
ladders and related equipment, 628
miscellaneous equipment, 635
registration, reporting and notice requirements, 624
safety precautions and requirements, 626
scaffolds, boatswain's chairs, and related equipment, 629
window, defined (window cleaning), 623
worker
register for (designated substance - asbestos), 704
workers
duty re control program (designated substances), 658
information for (designated substance - asbestos), 678
raising or lowering (oil and gas - offshore), 609
working at heights training (occupational health and safety awareness and training), 596
Workplace Safety and Insurance Act, 1997, 614, 663, 704
workplaces, exemptions (occupational health and safety awareness and training), 594

- work practices (designated substances)
 - charging, 671
 - choking, 672
 - maintenance and repair, 672
 - pushing, 672
- work report, asbestos (designated substance - asbestos), 703
- work rest for grinding wheel (oil and gas - offshore), 608
- work zones, contaminated environments and (diving operations), 579
- written notice (diving operations), 538

X

- x-ray machine
 - animal diagnostics, 529
 - cabinet enclosures, 530
 - defined (x-ray safety), 523
 - industrial radiography or fluoroscopy requirements, 527
- x-ray safety
 - schedule, 531
- x-ray safety (regulation), 522
 - definitions, 522
 - notice to the Ministry, 717
- x-ray, schedule (x-ray safety), 531
- x-rays, defined (x-ray safety), 523
- x-ray source
 - analytic x-ray equipment and, 530
 - defined (x-ray safety), 523
 - designee, 525
 - inspection prior to installing, 524
 - measures and procedures, 526
 - portable or mobile use, 524, 525
 - registration with director, 523
- x-ray worker
 - defined (x-ray safety), 523

**Ministry of Labour, Immigration,
Training and Skills Development**

**Occupational Health and Safety
Branch**

505 University Ave., 19th Floor
Toronto, ON, M7A 1T7

Canada

Local: 416-326-7770

Toll Free: 1-877-202-0008

Fax: 416-326-7761

Website: www.labour.gov.on.ca

Legal Services Branch

400 University Avenue, 11th Fl.,
Toronto ON, M7A 1T7

Local: 416-326-7950

Fax: 416-326-7985

Employment Practices Branch

400 University Avenue, 9th Floor
Toronto ON, M7A 1T7

Call Centre

Local: 416-326-7160 (GTA)

Toll Free: 1-800-531-5551 (Canada-
wide)

Fax: 416-326-7061

Dispute Resolution Services

400 University Avenue, 8th Floor
Toronto ON, M7A 1T7

Local: 416-326-7575

Fax: 416-314-8755

Material Testing Laboratory

Wilett Green Miller Centre
Building C

933 Ramsey Lake Road

Sudbury ON, P3E 6B5

Local: 705-670-5695

Fax: 705-670-5698

Publications Ontario

Local: 416 326-5300

Toll Free: 1-800-668-9938.

TTY Toll free within Ontario: 1-800-
268-7095

Fax: 416-659-8617

MLITSD - Field Offices

Central Region

Central Region East

5001 Yonge Street, Suite 1600

North York, ON, M7A 0A3

Local: 647-777-5005

Fax: 647-777-5010

2275 Midland Avenue, Unit #1

Scarborough, ON, M1P 3E7

Local: 416-314-5300

Fax: 416-314-5410 or 416-314-5405

Central Region West

1110 Stellar Drive, Unit #102

Newmarket, ON, L3Y 7B7

Local: 905-715-7061

Toll Free: 1-888-299-3138

Fax: 905-715-7140

1290 Central Parkway West,
4th Floor

Mississauga, ON, L5C 4R3

Local: 905-273-7800

Toll Free: 1-800-268-2988

Fax: 905-615-7098 or 905-615-7078

Western Region

Hamilton/Halton/Brant

Ellen Fairclough Building

119 King Street West

Hamilton, ON, L8P 4Y7

Local: 905-577-6221

Toll Free: 1-800-263-6906

Fax: 905-577-1200

Kitchener--Waterloo

155 Frobisher Drive, Unit G213

Waterloo, ON, N2V 2E1

Local: 519-885-3378

Toll Free: 1-800-265-2468

Fax: 519-883-5694

London/Sarnia

217 York St., 5th Floor

London, ON, N6A 5P9

Resources

Local: 519-439-2210
Toll Free: 1-800-265-1676
Fax: 519-672-0268

Niagara
301 St. Paul St, 8th Floor
St. Catharines, ON, L2R 7R4
Local: 905-704-3994
Toll Free: 1-800-263-7260
Fax: 905-704-3011

Windsor
4510 Rhodes Drive, Suite 610
Windsor, ON, N8W 5K5
Local: 519-256-8277
Toll Free: 1-800-265-5140
Fax: 519-258-1321

Eastern Region

Kingston
Beechgrove Complex
51 Heakes Lane
Kingston, ON, K7M 9B1
Local: 613-545-0989
Toll Free: 1-800-267-0915
Fax: 613-545-9831

Ottawa
347 Preston Street, Tower III, 4th
Floor
Ottawa, ON, K1S 3J4
Local: 613-228-8050
Toll Free: 1-800-267-1916
Fax: 613-727-2900

Peterborough
300 Water Street North, 3rd Floor,
South Tower
Peterborough, ON K9J 8M5
Local: 705-755-4700
Toll Free: 1-800-461-1425
Fax: 705-755-4724

Northern Region

North Bay
101 McIntyre Street West, 2nd Floor
North Bay, ON P1B 2Y5

Local: 705-497-5234
Toll Free: 1-877-717-0778
Fax: 705-497-6850

Sault Ste. Marie
70 Foster Dr, Ste. 480
Sault Ste. Marie, ON P6A 6V4
Local: 705-945-6600
Toll Free: 1-800-461-7268
Fax: 705-949-9796

Sudbury
159 Cedar Street, Suite 301
Sudbury, ON, P3E 6A5
Local: 705-564-7400 or 1-800-461-
6325
Fax: 705-564-7437

Thunder Bay
435 James Street South, Ste. 222
Thunder Bay, ON, P7E 6S7
Local: 807-475-1691 or 1-800-465-
5016
Fax: 807-475-1646

Timmins
Ontario Government Complex,
D Wing
5520 Highway 101 East
South Porcupine, ON, P0N 1H0
Local: 705-235-1900
Toll Free: 1-800-461-9847
Fax: 705-235-1925

Ministry of Environment

1st Floor, 135 St. Clair Avenue West
Toronto, ON
M4V 1P5

Public Information Centre
Local: 416-325-4000
Toll-free: 1-800-565-4923
TTY Local: 416-326-9236
TTY Toll Free: 1-800-515-2759
Email: picemail.moe@ontario.ca

Spills or Emergencies:

Toll Free: 1-800-268-6060

Pollution Hotline:

Toll Free: 1-866-663-8477

Freedom of Information:

Local: 416-314-4075

Environment Canada
Inquiry Centre
10 Wellington, 23rd Floor
Gatineau QC, K1A 0H3
Local: 819-997-2800
Toll Free: 1-800-668-6767
Fax: 819-994-1412
TTY: 819-994-0736
Email: enviroinfo@ec.gc.ca

Ministry of Health and Long-Term
Care
900 Bay Street, M-1B114, Macdonald
Block
Toronto, ON, M7A 1N3
Toll Free: 1-866-532-3161
TTY: 1-800-387-5559

Health Canada
Address Locator 0900C2
Ottawa, ON, K1A 0K9
Local: 613-957-2991
Toll Free: 1-866-225-0709
TTY: 1-800-267-1245
Facsimile: 613-941-5366
Email: info@hc-sc.gc.ca

Ministry of Transport
St. Catharines
301 St. Paul Street
St. Catharines, ON L2R 7R4
General Inquiry: 1-800-268-4MTO
(4686)

Transport Canada
Ontario Regional Office
4900 Yonge Street, Suite 400
North York, ON, M2N 6A5
Toll Free: 1-888-231-2330
Toll Free Fax: 1-877-822-2129

**Workplace Safety and Insurance
Board (WSIB)**

Workplace Safety and Insurance
Board (WSIB)
200 Front St. West, 11th Floor
Toronto, ON, M5V 3J1
Local: 416-344-1000
Toll Free: 1-800-387-0750
TTY Toll Free: 1-800-387-0050
Fax: 416-344-4684 or 1-888-313-
7373
Email: prevention@wsib.on.ca
Web: www.wsib.on.ca

WSIB Collections Branch
P.O.Box 2099 Stn. LCD1
120 King St. West
Hamilton, ON, L8N 4C5
Toll Free: 1-800-268-0929
Fax: 905-521-4203
Security and Investigations Branch
Toll Free: 1-888-745-3237
Email: sileads@wsib.on.ca

Office Locations

Guelph Office (For Agriculture Sector
Only. For all other small business
services in the area, see Kitchener.)
100 Stone Road West, 2nd floor
Guelph, ON, N1G 5L3
519-826-4650
1-888-259-4228
Fax: 519-826-4678

Hamilton Office
120 King Street West
Hamilton, ON, L8N 4C5
Mailing Address
P.O. Box 2099
Station LCD1
120 King Street West
Hamilton, ON, L8N 4C5
905-523-1800
1-800-263-8488
Fax: 905-521-4576

Resources

Kingston Office
234 Concession Street, Suite 304
Kingston, ON, K7K 6W6
613-544-9682
1-800-267-9461
Fax: 613-544-1510

Kitchener Office
55 King Street West
3rd Floor
Kitchener, ON, N2G 4W1
519-576-4130
1-800-265-2570
Fax: 519-576-2667

London Office
148 Fullarton Street
7th Floor
London, ON, N6A 5P3
519-663-2331
1-800-265-4752
Fax: 1-888-313-7373

North Bay Office
128 McIntyre Street West
North Bay, ON, P1B 2Y6
705-472-5200
1-800-461-9521
Fax: 705-472-9801

Ottawa Office
180 Kent Street
Tower 4, Suite 400
Ottawa, ON, K1P 0B6
613-237-8840
1-800-267-9601
Fax: 613-239-3321

Sarnia Liaison Office
Lambton Shared Services Centre
Bayside Mall
150 Christina Street North
Sarnia, ON, N7T 8H3
519-344-7926
Fax: 519-344-7202

Sault Ste. Marie Office
153 Great Northern Road
Sault Ste. Marie, ON, P6B 4Y9

705-942-3002
1-800-461-6005
Fax: 705-942-7582

St. Catherines Office
301 St. Paul Street
8th Floor
St. Catharines, ON, L2R 7R4
905-687-8622
1-800-263-2484
Fax: 905-687-7117

Sudbury
30 Cedar Street
Sudbury, ON, P3E 1A4
705-675-9301
1-800-461-3350
Fax: 705-675-9367

Thunder Bay Office
1113 Jade Court
Suite 200
Thunder Bay, ON, P7B 6V3
807-343-1710
1-800-465-3934
Fax: 807-343-1702

Timmins Office
5520 Highway 101 East,
Ontario Government Complex
P0 Bag 4020
South Porcupine ON, P0N 1H0
705-235-6130
1-800-461-9856
Fax: 705-235-6140

Toronto Office
200 Front Street West
Toronto, ON, M5V 3J1
416-344-1000
1-800-387-0750
Fax: 416-344-4684

Windsor Office
2485 Ouellette Avenue
Windsor, ON, N8X 1L5
Mailing Address
P.O. Box 1617
Windsor, ON

N9A 7B7
519-966-0660
1-800-265-7380

Ontario Human Rights Commission

180 Dundas St. West, 8th Floor
Toronto, ON, M7A 2R9

The Human Rights Tribunal of Ontario deals directly with all claims of discrimination filed under the Human Rights Code. The Tribunal resolves applications using mediation or adjudication. The Tribunal can be contacted at 416-326-1312 or 1-866-598-0322.

The Human Rights Legal Support Centre offers legal services to people in Ontario who have experienced discrimination. The Centre can be contacted at 416-597-4900 or 1-866-625-5179. TTY Toll Free: 1-866 612-8627 or 416-597-4903

Recorded information is also available via telephone:
Local: 416-326-9511
Toll Free: 1-800-387-9080
TTY Local: 416-326 0603
TTY Toll Free: 1-800-308-5561
Email: info@ohrc.on.ca
Web: www.hrlsc.on.ca

Ontario Labour Relations Board (OLRB)

505 University Ave., 2nd Floor
Toronto, ON, M5G 2P1
Local: 416-326-7500
Toll Free: 1-877-339-3335
Fax: 416-326-7531

Occupational Health Clinics

Provincial Office
15 Gervais Drive, Suite 601
Don Mills, ON. M3C 1Y8
Tel 416.510.8713 1.877.817.0336
Fax 416.443.9132
Email: info@ohcow.on.ca

Hamilton
848 Main Street East
Hamilton, Ontario L8M 1L9
Tel 905.549.2552 1.800.263.2129
Fax 905.549.7993
Email: hamilton@ohcow.on.ca

Sarnia-Lambton
171 Kendall Street
Point Edward, Ontario N7V 4G6
Tel 519.337.4627
Fax 519.337.9442
Email: sarnia@ohcow.on.ca

Sudbury
84 Cedar Street, 2nd Floor
Sudbury, ON P3E 1A5
Tel 705.523.2330 1.800.461.7120
Fax 705.523.2606
Email: sudbury@ohcow.on.ca

Thunder Bay
1151 Barton Street. Suite 103B
Thunder Bay, ON, P7B 5N3
Tel 807.623.3566
Fax 807.622.5847
Email: Thunderbay@ohcow.on.ca

Toronto
970 Lawrence Ave. West, Suite 110
Toronto, ON, M6A 3B6
Tel 416.449.0009 1.888. 596.3800
Fax 416.449.7772
Email: toronto@ohcow.on.ca

Windsor
3129 Marentette Avenue, Unit #1
Windsor, ON, N8X 4G1
Tel 519.973.4800 1.800.565.3185
Fax 519.973.1906
Email: windsor@ohcow.on.ca

Other Safety Resources

American Conference of Government
Industrial Hygienist (ACGIH)
1330 Kemper Meadow Dr.
Cincinnati, Ohio, United States of
America

Resources

45240
Customers/Members Phone: 513-742-2020
Administrative Phone: 513-742-6163
Fax: 513-742-3355
Email: mail@acgih.org

Canadian-Ontario Business Service
Centre (COSCC)
Local: 416-775-3456
Toll Free: 1-888-576-4444
Web: www.canadabusiness.ca

Canadian Standards Association
(CSA)
5060 Spectrum Way, Suite 100
Mississauga, Ontario, L4W 5N6
Toll-Free: (800) 463-6727
Tel: (416) 747-4000
Fax: (416) 747-2473

Canadian Welding Bureau
8260 Parkhill Dr.
Milton, ON, L9T 5V7
Toll Free: 1-800-844-6790
Fax at 905-542-1318
Web: info@cwbggroup.org

Electrical Safety Authority (ESA)
Customer Service Centre
P.O. Box 24143
Pinebush Postal Outlet
Cambridge, ON, N1R 8E6
Toll Free: 1-877-372-7233
Fax: 1-800-667-4278
Toll Free Fax: 1-800-472-5485
Email: esa.cambridge@
electricalsafety.on.ca

Legal Aid Ontario - Provincial Head
Office
Atrium on Bay
40 Dundas Street West, Suite 200
Toronto, ON, M5G 2H1
Local: (416) 979-1446
Toll free: 1-800-668-8258
TTY Local: (416) 598-8867
TTY Toll free: 1-866-641-8867
Fax: (416) 979-8669

General inquires: info@lao.on.ca

National Institute of Disability
Management and Research
(NIDMAR)
830 Shamrock St., Ste. 202
Port Alberni, BC, V8X 2V1
Local: 250-386-4388
Fax: 250-386-4398
Email: nidmar@nidmar.ca
Web: www.nidmar.ca
Occupational Hygiene Association of
Ontario
6519B Mississauga Rd
Mississauga, ON, L5N 1A6
Local: 905-567-7196
Fax: 905-567-7191
Email: office@ohao.org
Web: www.ohao.org

Office of the Fire Marshal
Ministry of Community Safety and
Correctional Services
5775 Yonge St., 7th Floor
Toronto, ON, M2M 4J1
Local: 416-3253100
Toll Free: 1-800-565-1842
Fax: 416-325-3126
Web: www.ofm.gov.on.ca

Safe Communities Canada
64 Charles Street East, Suite 201
Toronto, ON, M4Y 1T1
Telephone: (416) 964-0008
Facsimile: (416) 964-0089
E-mail: info@safecommunities.ca
Web Site: www.safecommunities.ca

Standards Council of Canada
270 Albert St., Suite 200
Ottawa, ON, K1P 6N7
Local: 613-238-3222
Fax: 613-569-7808
Email: info@scc.ca
Web: www.scc.ca

Technical Standards and Safety
Authority (TSSA)
14th Floor, Centre Tower

3300 Bloor Street West
Toronto, Ontario, M8X 2X4
Toll Free: 1-877-682-8772
Email: customerservices@tssa.org

Notes

Notes

Notes

Notes

Notes

Notes

Notes

Notes

Notes