

## **Appendices**

### General

The 2009 edition of the OH&S Code marked the first time that Part 9 accepted fall protection equipment approved to standards from the U.S. and Europe. Fall protection equipment approved to any one of these standards is considered to offer an equivalent level of worker protection. Employers and workers in Alberta now have access to a broader range of equipment to safely meet their fall protection needs.

### Alberta OH&S Code section 3.1 Previous editions of referenced standards

If a standard referenced in the Alberta OH&S Code applies to equipment manufactured or installed on or after a specified effective date, an employer must ensure that equipment manufactured or installed prior to that date was approved to or, as applicable, met the requirements of, the edition of the referenced standard that was in effect at the time the equipment was manufactured or installed.

## Appendix 1: Due Diligence

What is Due Diligence? Due diligence is the ability to demonstrate that a person did what could reasonably be expected under their circumstances, in order to satisfy a legal requirement. A due diligence defence depends on your ability to demonstrate the actions taken before an incident occurs, not after.

Due diligence is providing reasonable efforts to comply with the legislation; not a perfection standard. Even within the best health and safety systems, non-compliance may occur from time-to-time, and those incidents of non-compliance may result in a serious incident. Reasonably practicable There are many similarities between the concepts of “doing what is reasonably practicable” and “due diligence.” The key difference is “doing what is reasonably practicable” is a legal obligation that you must perform at all times. “Due diligence” is a defense where the person has failed to comply with an OH&S legal requirement but can prove that they did everything reasonable to avoid that noncompliance.

How do I prove due diligence? To prove that everything reasonable has been done and due diligence has been applied, it is necessary to consider the following items:

- 1) Foreseeability — could a reasonable person foresee that something could go wrong?
- 2) Preventability — is there an opportunity to prevent an injury or incident?
- 3) Control — who has the ability or responsibility to prevent an injury or incident from occurring?

Employer requirements The Canadian Centre for Occupational Health and Safety in the fact sheet: OH&S Legislation in Canada – Due Diligence sets out the following factors to establish due diligence (please note that this is not an exhaustive list):

- The employer must have in place written OH&S policies, practices, and procedures. These documents would demonstrate that the employer carried out workplace safety audits, identified hazardous practices and hazardous conditions and made necessary changes to correct these conditions, and provided workers with information to enable them to work safely.
- The employer must provide the appropriate training and education to the workers so that they understand and carry out their work according to the established policies, practices, and procedures.
- The employer must train its supervisors to ensure they are competent persons, as defined in legislation.

## **Appendix 2: Criminal Code of Canada Section 217.1**

The Westray bill or Bill C-45 was federal legislation that amended the Canadian *Criminal Code* and became law on March 31, 2004. The Bill (introduced in 2003) established new legal duties for workplace health and safety and imposed serious penalties for violations that result in injuries or death. The Bill provided new rules for attributing criminal liability to organizations, including corporations, their representatives and those who direct the work of others.

NOTE: The Canadian federal government reuses bill numbers. Currently Bill C-45 is being used to announce Act(s) respecting cannabis and to amend the *Controlled Drugs and Substances Act*, the *Criminal Code* and other Acts.

The amendments announced in Bill C-45 (2003), also known as the "Westray Bill", was created as a result of the 1992 Westray coal mining disaster in Nova Scotia where 26 miners were killed after methane gas ignited causing an explosion. Despite serious safety concerns raised by employees, union officials and government inspectors at the time, the company instituted few changes. Eventually, the disaster occurred.

After the accident the police and provincial government failed to secure a conviction against the company or three of its managers. A Royal Commission of Inquiry was established to investigate the disaster. In 1998, the Royal Commission made 74 recommendations. The findings of this commission (in particular recommendation 73) were the movement that led to amendments of the *Criminal Code*.

These provisions of the *Criminal Code* affect all organizations and individuals who direct the work of others, anywhere in Canada. These organizations include federal, provincial and municipal governments, corporations, private companies, charities and non-governmental organizations

### **Who is responsible for enforcing occupational health and safety laws?**

Police and crown attorneys enforce the *Criminal Code*. The police and crown are responsible for investigating serious accidents and will determine whether any charges should be laid under the Canadian *Criminal Code*. The *Criminal Code* is a very different set of rules, and should not be confused with "regular" occupational health and safety laws (OH&S) and how they are enforced.

## **Appendix 3: OH&S Act Part 1 Obligations of Work Site Parties**

### **Obligations of employers**

3(1) Every employer shall ensure, as far as it is reasonably practicable for the employer to do so,

(a) the health and safety and welfare of

(i) workers engaged in the work of that employer,

(ii) those workers not engaged in the work of that employer but present at the work site at which that work is being carried out, and

(iii) other persons at or in the vicinity of the work site who may be affected by hazards originating from the work site,

(b) that the employer's workers are aware of their rights and duties under this Act, the regulations and the OH&S code and of any health and safety issues arising from the work being conducted at the work site,

(c) that none of the employer's workers are subjected to or participate in harassment or violence at the work site,

(d) that the employer's workers are supervised by a person who

(i) is competent, and

(ii) is familiar with this Act, the regulations and the OH&S code that apply to the work performed at the work site,

(e) that the employer consults and cooperates with the joint work site health and safety committee or the health and safety representative, as applicable, to exchange information on health and safety matters and to resolve health and safety concerns,

(f) that health and safety concerns raised by workers, supervisors, self-employed persons and the joint work site health and safety committee or health and safety representative are resolved in a timely manner, and

(g) that on a work site where a prime contractor is required, the prime contractor is advised of the names of all of the supervisors of the workers.

- (2) Every employer shall ensure that workers are adequately trained in all matters necessary to protect their health and safety, including before the worker
- (a) begins performing a work activity,
  - (b) performs a new work activity, uses new equipment or performs new processes, or
  - (c) is moved to another area or work site.

(3) Every employer shall cooperate with any person exercising a duty imposed by this Act, the regulations and the OH&S code.

(4) Every employer shall comply with this Act, the regulations and the OH&S code.

Obligations of supervisors

4 Every supervisor shall

- (a) as far as it is reasonably practicable for the supervisor to do so,
  - (i) ensure that the supervisor is competent to supervise every worker under the supervisor's supervision,
  - (ii) take all precautions necessary to protect the health and safety of every worker under the supervisor's supervision,
  - (iii) ensure that a worker under the supervisor's supervision works in the manner and in accordance with the procedures and measures required by this Act, the regulations and the OH&S code,
  - (iv) ensure that every worker under the supervisor's supervision uses all hazard controls, and properly uses or wears personal protective equipment designated or provided by the employer or required to be used or worn by this Act, the regulations or the OH&S code, and
  - (v) ensure that none of the workers under the supervisor's supervision are subjected to or participate in harassment or violence at the work site,
- (b) advise every worker under the supervisor's supervision of all known or reasonably foreseeable hazards to health and safety in the area where the worker is performing work,
- (c) report to the employer a concern about an unsafe or harmful work site act that occurs or has occurred or an unsafe or harmful work site condition that exists or has existed,
- (d) cooperate with any person exercising a duty imposed by this Act, the regulations and the OH&S code, and
- (e) comply with this Act, the regulations and the OH&S code.

## **Obligations of workers**

- 5 Every worker shall, while engaged in an occupation,
- (a) take reasonable care to protect the health and safety of the worker and of other persons at or in the vicinity of the work site while the worker is working,
  - (b) cooperate with the worker's supervisor or employer or any other person for the purposes of protecting the health and safety of
    - (i) the worker,
    - (ii) other workers engaged in the work of the employer, and
    - (iii) other workers not engaged in the work of that employer but present at the work site at which that work is being carried out,
  - (c) at all times, when the nature of the work requires, use all devices and wear all personal protective equipment designated and provided for the worker's protection by the worker's employer or required to be used when worn by the worker by this Act, the regulations or the OH&S code,
  - (d) refrain from causing or participating in harassment or violence,
  - (e) report to the employer or supervisor a concern about an unsafe or harmful work site act that occurs or has occurred or an unsafe or harmful work site condition that exists or has existed,
  - (f) cooperate with any person exercising a duty imposed by this Act, the regulations and the OH&S code, and
  - (g) comply with this Act, the regulations and the OH&S code.

## **Obligations of suppliers**

6(1) Every supplier shall

(a) as far as it is reasonably practicable for the supplier to do so, ensure that any equipment that the supplier supplies is in safe operating condition,

(b) as far as it is reasonably practicable for the supplier to do so, ensure that any harmful substance or explosive the supplier supplies is safe to use, when used in accordance with the manufacturer's specifications,

(c) as far as it is reasonably practicable for the supplier to do so, if the supplier has responsibility under an agreement to maintain equipment, ensure that the equipment is maintained in a safe condition, in accordance with the manufacturer's specifications, if any, and in compliance with this Act, the regulations and the OH&S code,

(d) as far as it is reasonably practicable for the supplier to do so, provide a notice to all of the employers supplied by the supplier with equipment, or to the purchasers or lessees of the equipment, when the supplier becomes aware or ought reasonably to be aware that the equipment that was supplied or is about to be supplied does not comply with a standard prescribed under the regulations or the OH&S code,

(e) as far as it is reasonably practicable for the supplier to do so, provide a notice to all of the employers supplied by the supplier with a harmful substance or explosive when the supplier becomes aware or ought reasonably to be aware that the harmful substance or explosive that was supplied or is about to be supplied does not comply with a standard prescribed under the regulations or the OH&S code,

(f) cooperate with any person exercising a duty imposed by this Act, the regulations and the OH&S code, and

(g) comply with this Act, the regulations and the OH&S code.

(2) Subject to subsection (1)(d) and (e), every supplier shall ensure that any equipment, harmful substance or explosive that the supplier supplies complies with this Act, the regulations and the OH&S code.

2017 cO-2.1 s6;2018 c11 s14

### **Obligations of service providers**

7(1) Every service provider shall ensure, as far as it is reasonably practicable for the service provider to do so, that any service provided to a person to meet an obligation in the Act, the regulations or the OH&S code will enable the person to comply with this Act, the regulations and the OH&S code.

(2) Every service provider shall

(a) ensure that all services provided in respect of a work site comply with the Act, the regulations and the OH&S code,

(b) ensure that services provided to a person to meet an obligation in the Act, the regulations or the OH&S code are completed by workers who are competent to provide those services,

(c) ensure that, as far as it is reasonably practicable for the service provider to do so, no person at or near a work site is endangered as a result of the service provider's activity,

(d) cooperate with any person exercising a duty imposed by this Act, the regulations and the OH&S code, and

(e) comply with this Act, the regulations and the OH&S code.

### **Obligations of owners**

8 Every owner shall

(a) ensure, as far as it is reasonably practicable to do so, that the land, infrastructure and any building or premises on the land that is under the owner's control is provided and maintained in a manner that does not endanger the health and safety of workers or any other person,

(b) cooperate with any person exercising a duty imposed by this Act, the regulations and the OH&S code, and

(c) comply with this Act, the regulations and the OH&S code.

### **Obligations of contractors**

9(1) Every contractor shall ensure, as far as it is reasonably practicable to do so, that

(a) every work site where an employer, employer's worker or self-employed person works pursuant to a contract with the contractor, and

(b) every work process or procedure performed at a work site by an employer, employer's worker or self-employed person pursuant to a contract with the contractor that is under the control of the contractor does not create a risk to the health and safety of any person.

(2) Every contractor shall

(a) if the contractor is on a work site that has a prime contractor, advise the prime contractor of the name of every employer or self-employed person with whom the contractor directs the work activities,

(b) cooperate with a person exercising a duty imposed by this Act, the regulations and the OH&S code, and

(c) comply with this Act, the regulations and the OH&S code.

### **Obligations of prime contractors**

10(1) Every construction and oil and gas work site or a work site or class of work sites designated by a Director must have a prime contractor if there are 2 or more employers or self-employed persons, or one or more employers and one or more self-employed persons involved in work at the work site.

(2) The person in control of the work site shall designate in writing a person as the prime contractor of the work site.

(3) The name of the prime contractor must be posted in a conspicuous place at the work site.

(4) If the person in control of the work site fails to designate a person as the prime contractor as required in subsection (2), the person in control of the work site is deemed to be the prime contractor.

(5) The prime contractor shall

(a) establish, as far as it is reasonably practicable to do so, a system or process that will ensure compliance with this Act, the regulations and the OH&S code in respect of the work site,

(b) coordinate, organize and oversee the performance of all work at the work site to ensure, as far as it is reasonably practicable to do so, that no person is exposed to hazards arising out of, or in connection with, activities at the work site,

(c) conduct the prime contractor's own activities in such a way as to ensure, as far as it is reasonably practicable to do so, that no person is exposed to hazards arising out of, or in connection with, activities at the work site,

(d) consult and cooperate with the joint work site health and safety committee or health and safety representative, as applicable, to attempt to resolve any health and safety issues,

(e) coordinate the health and safety programs of employers and self-employed persons on the work site, if 2 or more employers or self-employed persons or one or more employers and one or more self-employed persons on the work site have a health and safety program,

(f) cooperate with any other person exercising a duty imposed by this Act, the regulations and the OH&S code, and

(g) comply with this Act, the regulations and the OH&S code.

(6) If a requirement in this Act, the regulations or the OH&S code imposes a duty on an employer or a self-employed person with respect to equipment, work site infrastructure or an excavation and the equipment or infrastructure is designed, constructed, erected or installed, or the excavation is conducted by or on behalf of a prime contractor, the prime contractor shall comply with the requirement as if the requirement were directly imposed on the prime contractor.

(7) Subsection (6) does not relieve the employer, self-employed person or prime contractor from fulfilling other responsibilities under this Act, the regulations and the OH&S code.

### **Obligations of self-employed persons**

11 Every self-employed person shall

- (a) conduct the self-employed person's work so as to ensure that the self-employed person or any other person is not exposed to hazards from activities at the work site,
- (b) when working on a project that has a prime contractor, advise the prime contractor that the self-employed person is working on the project,
- (c) if a requirement of this Act, the regulations or the OH&S code imposes a duty on an employer or a worker, comply with the requirement as if the requirement were directly imposed on the self-employed person, with any necessary modifications,
- (d) report, to the extent that it is reasonably practicable to do so, to all affected employers and self-employed persons at the work site a concern about an unsafe or harmful work site act that occurs or has occurred or an unsafe or harmful work site condition that exists or has existed,
- (e) cooperate with any other person exercising a duty imposed by this Act, the regulations and the OH&S code, and
- (f) comply with this Act, the regulations and the OH&S code.

### **Obligations of temporary staffing agencies**

12 Every temporary staffing agency shall

- (a) ensure, as far as it is reasonably practicable for the temporary staffing agency to do so,
  - (i) that the worker to be assigned to another employer is suitable to perform the task for which the worker is to be assigned,
  - (ii) that the worker is equipped with any necessary personal protective equipment prior to deployment to the other employer, or will be so equipped prior to commencing work activities with the other employer, and
  - (iii) that the other employer is capable of ensuring the health and safety of the worker,
- (b) cooperate with any other person exercising a duty imposed by this Act, the regulations and the OH&S code, and
- (c) comply with this Act, the regulations and the OH&S code.

### **Multiple obligations**

13(1) In this section, "function" means the function of prime contractor, owner, contractor, employer, supervisor, service provider, supplier, worker, self-employed person or temporary staffing agency.

(2) If a person has 2 or more functions under this Act in respect of one work site, the person shall meet the obligations of each function.

(3) If one or more provisions in this Act, the regulations or the OH&S code imposes the same duty on more than one person and one of the persons subject to that duty complies with the applicable provision, the other persons subject to that duty are relieved of their duty only during the time when

- (a) simultaneous compliance of that duty by more than one person would result in unnecessary duplication of effort and expense, and
- (b) the health and safety of any person at the work site is not put at risk by compliance with that duty by only one person.

## **Appendix 4: OH&S Act Part 2 Availability of Information**

### **Duty to provide information**

14(1) In this section, “health and safety information” means information that may affect the health and safety of a person at a work site and includes information about hazards at the work site, hazard controls and work practices and procedures, but does not include personal information about an identifiable individual, confidential proprietary information or trade secrets.

(2) Every employer shall keep readily available all health and safety information and provide that information to

(a) the joint work site health and safety committee or health and safety representative at the work site,

(b) the workers, if there is no joint work site health and safety committee and no health and safety representative, and

(c) the prime contractor, if there is one.

(3) Every employer shall ensure that current paper or downloaded or stored electronic copies of this Act, the regulations and the OH&S code are readily available for reference by workers, the joint work site health and safety committee and the health and safety representative, if one exists.

(4) Every prime contractor or contractor shall ensure that the owner and any employer, supplier, service provider or self-employed person on a work site is informed of any existing or potential work site hazards that may affect workers, self-employed persons or other persons at the work site.

(5) Every owner shall ensure that any hazard identified by the owner is communicated to all workers, employers, self-employed persons, contractors, prime contractors, suppliers and service providers that are conducting work activities, or may be reasonably anticipated to conduct work activities, in relation to the land, infrastructure and any building or premises on the land.

(6) Every supplier shall, as far as it is reasonably practicable for the supplier to do so,

(a) ensure that any equipment is supplied with a written copy of the manufacturer’s specifications and any other instructions for safe use, as applicable, if such specifications and instructions exist, and

(b) ensure that any harmful substance or explosive the supplier supplies is supplied with a written copy of the manufacturer’s specifications and instructions for safe use, as applicable, if such specifications and instructions exist.

(7) If a person is required to make a report or plan under this Act, the regulations or the OH&S code, the person shall ensure that the report or plan is in writing and a paper or downloaded or stored electronic copy of the report or plan is readily available for reference by workers, the joint work site health and safety committee and the health and safety representative, if there is one, at the work site affected by the report or plan.

(8) If a person is required to develop procedures or to put procedures in place under this Act, the regulations or the OH&S code, the person shall ensure that they are in writing and a paper or downloaded or stored electronic copy of the current procedures is readily available for reference by workers, the joint work site health and safety

committee and the health and safety representative, if there is one, at the work site affected by the procedures.

### **Posting orders and notices**

15(1) An employer, self-employed person, owner or prime contractor shall post a copy of the following at a work site:

(a) an order made under this Act to that employer, self-employed person, owner or prime contractor that is relevant to the work site;

(b) a health and safety notice prepared by or for a Director concerning conditions or procedures at the work site.

(2) The employer, self-employed person, owner, or prime contractor referred to in subsection (1) shall post the copy in a conspicuous place at the work site as soon as the employer, self-employed person, owner or prime contractor receives it.

(3) The employer, self-employed person, owner or prime contractor referred to in subsection (1) shall keep an order or notice issued under this Act posted until the conditions specified in the order or notice are met.

(4) Despite subsections (1) to (3), the employer, self-employed person, owner or prime contractor referred to in subsection (1) may provide the orders and notices in electronic format providing workers, the joint work site health and safety committee or health and safety representative, if there is one, are informed of the orders and notices and have ready access to them.

(5) Despite subsections (1) to (3), if the work site is mobile and posting is impracticable, the employer, self-employed person, owner or prime contractor referred to in subsection (1) shall ensure that the information in the order or the notice is brought to the attention of all affected workers at the work site.

## **Appendix 5: OH&S Act Part 4 Dangerous Work and Discriminatory Action**

### **Right to refuse dangerous work**

31(1) Subject to this section and section 5, a worker may refuse to work or to do particular work at a work site if the worker believes on reasonable grounds that there is a dangerous condition at the work site or that the work constitutes a danger to the worker's health and safety or to the health and safety of another worker or another person.

(2) A worker who refuses to work or to do particular work under subsection (1) shall promptly report the refusal and the reasons for it to the worker's employer or supervisor or to another person designated by the employer or supervisor.

(3) If the employer does not remedy the dangerous condition immediately, the employer shall immediately inspect the dangerous condition in the presence of the worker, when it is reasonably practicable to do so and when the presence of the worker does not create a danger to the health and safety of that worker or of any other person, and one of the following persons, when it is reasonably practicable to do so and when the presence of that person does not create a danger to the health and safety of that person or of any other person:

(a) if there is a joint work site health and safety committee established under section 16, the co-chair or a committee member who represents workers;

(b) if there is a health and safety representative designated under section 17, that representative;

(c) if there is no committee or representative, or where no committee member or representative is available, another worker selected by the worker refusing to do the work.

(4) The employer required to inspect under subsection (3) shall take any action necessary to remedy any dangerous condition or ensure that such action is taken.

(5) Until the dangerous condition is remedied, the worker who reported it may continue to refuse to work or to do particular work to which the dangerous condition may relate.

(6) When a worker has refused to work or to do particular work under subsection (1), the employer shall not request or assign another worker to do the work until the employer has determined that the work does not constitute a danger to the health and safety of any person or that a dangerous condition does not exist.

(7) Where the employer assigns another worker to do the work, the employer shall advise that worker, in writing, of

(a) the first worker's refusal,  
(b) the reasons for the refusal,  
(c) the reason why, in the opinion of the employer, the work does not constitute a danger to the health and safety of any person or that a dangerous condition is not present, and

(d) that worker's right to refuse to do dangerous work under this section.

(8) On completing an inspection under subsection (3), the employer shall prepare a written report of the refusal to work, the inspection and action taken, if any, under subsection (4).

(9) The employer shall give a copy of the report completed under subsection (8) to

(a) the worker who refused work under subsection (1),  
(b) the joint work site health and safety committee, if one exists, and  
(c) the health and safety representative, if one exists.

(10) The employer shall ensure that a report given under subsection (9) does not contain any personal information related to the worker who refused to work under subsection (1).

#### **Report of dangerous condition to an officer**

32(1) If the dangerous condition or the danger to the worker's health and safety or to the health and safety of another worker or another person is not remedied after an inspection under section 31(3), the worker who refused to perform the work under section 31(1) or any person present during the inspection may file a complaint with an officer.

(2) On receiving a complaint under subsection (1), the officer shall investigate the matter and decide whether there is a dangerous condition or whether the work the worker has refused to do constitutes a danger to the health and safety of the worker or of any other worker or person at the work site.

(3) If the officer decides that there is a dangerous condition or a danger to the worker's health and safety or to the health and safety of any other worker or person at the work site, the officer shall

(a) make a written report stating the officer's decision,  
(b) make any order under this Act that the officer considers necessary, and  
(c) give a copy of the report and any order to  
(i) the worker who refused to do the work,  
(ii) the employer,  
(iii) the joint work site health and safety committee, if one exists,  
(iv) the health and safety representative, if one exists, and  
(v) any other person who filed a complaint.

(4) If the officer decides that a dangerous condition is not present, the officer shall, in writing,

(a) inform the employer and the worker of that decision,  
(b) inform the joint work site health and safety committee, if one exists, or the health and safety representative, if one exists, of that decision, and  
(c) inform the worker that the worker is no longer entitled to refuse to do the work.

### **Worker entitled to be paid despite refusal**

- 33(1) If a worker has refused to work or to do particular work under section 31(1),
- (a) the worker is entitled to the same wages and benefits that the worker would have received had the worker continued to work, and
  - (b) the employer may reassign the worker temporarily to alternate work.
- (2) A work reassignment under subsection (1)(b) is not considered discriminatory action for the purposes of section 35.

### **Employer not to make worker work in dangerous conditions**

- 34(1) When the employer or supervisor at a work site knows or ought to know of a condition at the work site that is or is likely to be dangerous to the health and safety of a worker, the employer or supervisor shall not require or permit any worker to do that work until the dangerous condition is remedied.
- (2) Subject to section 31, nothing in subsection (1) prevents the doing of any work or thing at a work site that may be necessary to remedy a condition that is or is likely to be dangerous to the health and safety of a worker.

### **Prohibition of discriminatory action**

- 35 No person shall take any discriminatory action against a worker, by reason of that worker
- (a) acting in compliance with this Act, the regulations, the OH&S code or an order given under this Act, the regulations or the OH&S code or the terms, conditions or requirements on an acceptance under section 55 or on an approval under section 56,
  - (b) being called to testify, intending to testify or testifying in a proceeding under this Act,
  - (c) giving relevant information about work site conditions affecting the health and safety of any worker engaged in work or any other person present at the work site to any of the following:
    - (i) an employer or a person acting on behalf of an employer;
    - (ii) an officer or another person concerned with the administration of this Act, the regulations or the OH&S code;
    - (iii) a joint work site health and safety committee or a health and safety representative,
  - (d) performing duties or exercising rights as a member of a joint work site health and safety committee or as a health and safety representative,
  - (e) assisting or having assisted with the activities of a joint work site health and safety committee or health and safety representative,
  - (f) refusing to do work under section 31(1),
  - (g) seeking to establish a joint work site health and safety committee or have a health and safety representative designated,
  - (h) being prevented from working because of an order under this Act, the regulations or the OH&S code, and
  - (i) taking reasonable action to protect the health and safety of that worker or any other person.

### **Discriminatory action complaint**

36(1) A worker who has reasonable cause to believe that the worker has been subjected to discriminatory action in respect of an alleged contravention of section 35 may file a complaint with an officer.

(2) An officer who receives a complaint under subsection (1) shall investigate, make a decision and prepare a written report of the worker's complaint, the investigation and the decision of the officer and shall give the worker and the employer a copy of the report.

(3) If, in the opinion of the officer, discriminatory action has occurred, the officer shall in writing order an employer to do one or more of the following:

(a) cease the discriminatory action;

(b) reinstate the worker to the worker's former employment under the same terms and conditions under which the worker was formerly employed;

(c) pay the worker not more than the equivalent of wages and benefits that the worker would have earned if the worker had not been subjected to discriminatory action;

(d) remove any reprimand or other reference to the matter from the worker's employment records;

(e) other measures to prevent recurrence.

(4) A worker or an employer who receives a report under subsection (2) may appeal the matter to the appeal body under section 71 by serving a notice of appeal on the appeal body within 30 days from the receipt of the report.

(5) If an officer determines that discriminatory action has been taken against a worker who has acted or participated in an activity described in section 35,

(a) there is a presumption in favour of the worker that the discriminatory action was taken against the worker because the worker acted or participated in an activity described in section 35, and

(b) the onus is on the employer to establish that the discriminatory action was taken against the worker for a reason other than acting or participating in an activity described in section 35.

## **Appendix 6: Availability of Specifications**

### OH&S Regulation Part 1 General 7(1) Availability of Specifications

7(1) If the Act, a regulation or an adopted code requires work to be done in accordance with a manufacturer's specifications or specifications certified by a professional engineer, an employer must ensure that

(a) the workers responsible for the work are familiar with the specifications, and

(b) the specifications are readily available to the workers responsible for the work.

(2) If the Act, a regulation or an adopted code refers to a manufacturer's or employer's specifications or specifications certified by a professional engineer, an employer must ensure that, during the period of time that the matters referred to in the specifications are in use, a legible copy of the specifications is readily available to workers affected by them.

(3) An employer must ensure that the original of the document setting out manufacturer's or employer's specifications or specifications certified by a professional engineer is available in Alberta for inspection by an officer.

## **Appendix 7: Working Alone**

This Part applies if a worker is working alone at a work site where assistance is not readily available if there is an emergency or the worker is injured or ill. This Part requires employers to assess their workplace and take preventive measures that eliminate or minimize hazards associated with working alone.

Requirements Section 393 Application Subsection 393(1) Two conditions The purpose of this Part is to ensure that workers working by themselves can do so safely. As a result, employers have responsibilities to minimize and eliminate risks associated with their workers who work alone.

The working alone requirements of this Part apply when both of the following conditions are met:

a worker is working by himself or herself; and

assistance is not readily available to the worker if there is an emergency or the worker is injured or ill.

Workers who work alone can be grouped into five broad categories:

(1) Workers who handle cash. This includes convenience store clerks, retail and food outlet workers, and taxi drivers.

(2) Workers who travel away from their base office to meet clients. This includes home care workers, social services workers, and bylaw enforcement officers.

(3) Workers who do hazardous work but have no routine interaction with customers or the public. This includes workers in the forestry, oil and gas industries.

(4) Workers who travel alone but have no routine interaction with customers or the public. This includes truck drivers and businesspeople in transit.

(5) Workers who are at risk of a violent attack because their work site is isolated from public view. This includes security guards and custodians.

A worker is considered to be working alone if the worker works by himself or herself at a work site in circumstances where assistance is not readily available when needed.

Employers can eliminate the risk of workers working alone, as well as the need to comply with the working alone requirements if they choose to organize work schedules and procedures to eliminate the need for workers to work by themselves.

If two or more workers of the same employer are working together, the working alone requirements of this Part do not apply. If two or more workers of different employers are working together, the working alone requirements of this Part do not apply as it is reasonable to expect that the workers can provide assistance to one another.

**Readily available—three assessment factors** Three factors must be assessed when determining if assistance is “readily available” in the event of an injury, illness or emergency:

(1) awareness—will other persons capable of providing assistance be aware of the worker’s needs?

(2) willingness—is it reasonable to expect that those other persons will provide helpful assistance?

(3) timeliness—will assistance be provided within a reasonable period of time? This assessment must consider the probability of injury associated with the circumstances of the work, e.g., type of work, location, hazards, etc. If the worker faces hazards that pose a high probability of injury, “readily available” may become “immediately available.” Worker expectations of the availability of assistance increase as the probability of injury associated with the work increases. Employers are reminded that this probability may change over time and with changing workplace conditions.

The employer must also provide effective radio, telephone or other electronic communication between the worker and persons capable of responding to the worker’s needs. The assessment may show that the portable two-way radio or cellular telephone is effective, or it may suggest that alternatives are necessary.

The availability of assistance in each situation must be assessed individually from the perspectives of awareness, willingness and timeliness.

Workers may be working alone—workers should be aware where each other is and the approximate return time. Factors that may influence whether this is a working alone situation include:

- how long the workers are separated
- whether the work poses a high probability of injury
- the presence of other persons at the work site

A worker is not “working alone” if all of the following conditions are met:

(1) awareness—the worker can get the attention of someone capable of providing helpful assistance when the worker requires it, e.g., by maintaining visual contact, staying within the hearing range of others, being continuously monitored by remote surveillance camera, sounding an alarm, making frequent contact with other workers or persons throughout the work period.

(2) willingness—persons expected to provide assistance to the worker must be capable and willing to do so when required. There should be a reasonable expectation that the persons being relied on to provide assistance can and actually will provide that assistance. Depending on circumstances, those persons may need access to a telephone to call Emergency Services (dialling 9-1-1), access to some other type of communication device to call for assistance, or specialized skills.

The employer must consider these factors when assessing the working alone situation.

(3) timeliness—the required assistance will be provided in a reasonable period of time. What is reasonable depends on factors such as the nature of the illness, injury or emergency, the physical location of the work and workers, the type of work being performed, the likelihood of injury and others.

In general, assistance must be provided as quickly as reasonably practical. Employers should discuss this and the other conditions with workers to ensure that worker needs are met.

**Video Surveillance Camera** Maintaining contact with workers may be achieved through the use of video surveillance cameras. The employer’s hazard assessment should assess to what extent workers using this system can respond to other workers who require assistance. A remote video monitoring room, or a non-continuous surveillance system that regularly switches images between several monitoring cameras may or may not meet the “readily available” assistance criterion of this Part. The hazard assessment should help to determine if this is the case.

Employers can eliminate the risk of workers working alone, as well as the need to comply with the working alone requirements, if they choose to organize work schedules and procedures to eliminate the need for workers to work by themselves. Overlapping shifts, having multiple workers work together, and rearranging the physical location of the work so that workers maintain contact with one another are examples of how working alone situations can be avoided.

## Appendix 8: Guardrails 315

(1) An employer must ensure that a guardrail required by this Code

(a) has a horizontal top member installed between 920 millimetres and 1070 millimetres above the base of the guardrail,

(b) has a horizontal, intermediate member spaced mid-way between the top member and the base,

(c) has vertical members at both ends of the horizontal members with intermediate vertical supports that are not more than 3 metres apart at their centres, and

(d) is constructed of lumber that is 38 millimetres by 89 millimetres or of material with properties the same as or better than those of lumber.

315(2) Despite subsection (1), a temporary guardrail does not require a horizontal intermediate member if it has a substantial barrier positioned within the space bounded by the horizontal top member, toe board and vertical members, that prevents a worker from falling through the space.

An employer must ensure that a guardrail is secured so that it cannot move in any direction if it is struck or if any point on it comes into contact with a worker, materials or equipment.

Wire rope or other similar material can be used for the horizontal top or intermediate member as long as it (a) has a nominal diameter or thickness of at least 6 millimetres (1/4 inch) to prevent cuts and lacerations; and (b) is under tension to minimize sag—unloaded sag should be no more than approximately the span length between tensioning devices divided by 60, and the lowest portion of the wire rope must not be less than the required minimum heights above the working or walking surface. If wire rope or a similar material is used as the horizontal top member, it must be flagged at intervals of at least 1.8 metres (6 feet) with highly visible material so that the wire rope or similar material can be seen.

With temporary guardrails, the intermediate horizontal member can be replaced with a substantial barrier such as a wire mesh or solid panel. The alternative must be a substantial barrier that, when positioned and secured between the top member, toe board, and vertical members, will prevent a worker from falling through the space.

An often-asked question is “How strong should a guardrail be?” As a general guide, a guardrail should be capable of withstanding a force of at least 890 newtons (200

pounds- force) applied within 5 centimetres (2 inches) of the top edge in any outward or downward direction. The guardrail can bend but must not break or separate (dislodge) from the structure to which it is attached.

### **Appendix 9: Safety Nets Part 22 320**

Exemption: does not apply to properly maintained rescue nets used by fire fighters and other emergency services personnel.

An employer must ensure that a safety net;

- (a) meets the requirements of ANSI Standard A10.11-1989 (R1998), Construction and Demolition Operations – Personnel and Debris Nets,
- (b) has safety hooks or shackles of drawn, rolled or forged steel with an ultimate tensile strength of not less than 22.2 kilonewtons,
- (c) has joints between net panels capable of developing the full strength of the web,
- (d) extends not less than 2.4 metres beyond the work area,
- (e) extends not more than 6 metres below the work area, and
- (f) is installed and maintained so that the maximum deflection under impact load does not allow any part of the net to touch another surface.

An employer must ensure that the supporting structure to which a personnel safety net is attached is certified by a professional engineer as being capable of withstanding any load the net is likely to impose on the structure.

The term “safety net” includes both personnel and debris nets.

Personnel nets are designed to safely catch workers who fall from a height; debris nets are designed to catch small, lightweight debris, tools, building materials, and other materials that might be dropped, pushed, knocked off or blown from a structure.

Personnel nets are made of a variety of natural and synthetic materials. Ropes or strips are used to produce webbing that is strong enough to withstand the force of a person falling, and a mesh size small enough to minimize personal injury. The mesh size of debris nets depends on the application. These nets are available in many sizes and strengths depending on the size and weight of the debris to be contained. Safety nets for debris can provide overhead protection in cases where workers are required to work

beneath an area exposed to falling debris. In general, safety nets tend to be most commonly used by the construction industry.

ANSI Standard A10.11-1989 (R1998), Construction and Demolition Operations—Personnel and Debris Nets, establishes safety requirements for the selection, installation, and use of personnel and debris nets during construction, repair, and demolition operations. The standard allows nets to be made of natural, e.g., manila, sisal, hemp, etc., or synthetic fibres. Procedures to be used by manufacturers during the testing of their products for compliance with the standard are also described. To meet the requirements of the Standard, personnel nets must be permanently labelled with the following information:

- (a) name of manufacturer;
- (b) identification of net material;
- (c) date of manufacture;
- (d) date of prototype test;
- (e) name of testing agency; and
- (f) serial number

The Standard does not require debris nets to be labelled. The ultimate strength of safety hooks and shackles is specified to ensure that hooks and shackles are sufficiently strong. Connections or joints between safety net panels must be as strong as the net panels themselves.

Safety nets should be installed as close as practicable under the walking or working surface on which workers are walking or working, and never more than 6 metres below that surface.

Safety nets must be installed with sufficient clearance underneath to prevent contact with the surface or structure below.

Out of necessity, safety nets are often secured to some type of supporting structure. As a result, a professional engineer must certify any structure to which a personnel safety net is attached. The certification must indicate that the structure is capable of withstanding any load the net is likely to impose on it, e.g., depending on the circumstances of the work site, one or more tool-laden workers falling the maximum distance of 6 metres.

## **Appendix 10: Full body harness 142**

An employer must ensure that (a) a full body harness manufactured on or after July 1, 2009 is approved to

- (a)
  - (i) CSA Standard CAN/CSA Z259.10-06, Full Body Harnesses,
  - (ii) ANSI/ASSE Standard Z359.1-2007, Safety requirements for personal fall arrest systems, subsystems and components, or
  - (iii) CEN Standard EN 361: 2007, Personal protective equipment against falls from a height — Full body harnesses, and
- (b) a worker using a personal fall arrest system wears and uses a full body harness.

## **Body belt 142**

An employer must ensure that

- (a) a body belt manufactured on or after July 1, 2009 is approved to
  - (i) CSA Standard Z259.1-05, Body belts and saddles for work positioning and Fall Restraint,
  - (ii) ANSI/ASSE Standard A10.32-2004, Fall Protection Systems – American National Standard for Construction and Demolition Operations, or
  - (iii) CEN Standard EN 358: 2000, Personal protective equipment for work positioning and prevention of falls from a height — Belts for work positioning and restraint and work positioning lanyards, and
- (b) a worker uses a body belt only as part of a Fall Restraint system or as part of a fall restrict system.

## **Appendix 11: Lanyard 142**

An employer must ensure that a lanyard manufactured on or after July 1, 2009 is approved to

- (a) CSA Standard Z259.11-05, Energy absorbers and lanyards,
- (b) ANSI/ASSE Standard Z359.1-2007, Safety requirements for personal fall arrest systems, subsystems and components, or
- (c) CEN Standard EN 354: 2002, Personal protective equipment against falls from a height — Lanyards

For compliance purposes, lanyards must bear the mark or label of a nationally accredited testing organization such as CSA, ANSI, CEN as evidence that the lanyard has been approved to the requirements of the Standards.

Whenever possible, a lanyard used for fall arrest should be equipped with a shock absorber. The shock absorber helps to limit fall arrest forces so that they do not exceed the injury threshold of the human body

## **Appendix 12: Shock Absorber**

An employer must ensure that if a shock absorber or shock absorbing lanyard is used as part of a personal fall arrest system, it is approved to one of the following standards if manufactured on or after July 1, 2009:

- (a) CSA Standard Z259.11-05, Energy absorbers and lanyards;
- (b) ANSI/ASSE Standard Z359.1-2007, Safety requirements for personal fall arrest systems, subsystems and components; or
- (c) CEN Standard EN 355: 2002, Personal protective equipment against falls from a height – Energy absorbers.

For compliance purposes, the shock absorber must bear the mark or label of a nationally accredited testing organization such as CSA, ANSI, CEN as evidence that the shock absorber has been approved to the requirements of the Standards. Products bearing a CE mark also comply with this section. The CE mark — Conformité Européenne — indicates that the company manufacturing the product has met the requirements of one or more European directives. The product also complies with the listed CEN European standard.

## **Appendix 13: Connectors, carabiners and snap hooks**

An employer must ensure that connecting components of a fall arrest system consisting of carabiners, D-rings, O-rings, oval rings, self-locking connectors and snap hooks manufactured on or after July 1, 2009 are approved, as applicable, to

(a) CSA Standard Z259.12-01 (R2006), Connecting Components for Personal Fall Arrest Systems (PFAS),

(b) ANSI/ASSE Standard Z359.1-2007, Safety requirements for personal fall arrest systems, subsystems and components,

(c) CEN Standard EN 362: 2004, Personal protective equipment against falls from a height – Connectors, or

(d) CEN Standard 12275: 1998, Mountaineering equipment – Connectors – Safety requirements and test methods.

For compliance purposes, carabiners, D-rings, O-rings, oval rings, self-locking connectors and snap hooks must bear the mark or label of a nationally accredited testing organization such as CSA, UL, SEI, etc., as evidence that the connector has been approved to the requirements of the Standards. Products bearing a CE mark also comply with this section. The CE mark—Conformité Européenne—indicates that the company manufacturing the product has met the requirements of one or more European directives. The product also complies with one or both of the listed CEN European standards.

## **Appendix: 14 Fall arresters**

An employer must ensure that a fall arrestor manufactured on or after July 1, 2009 is approved to

(a) CSA Standard Z259.2.1-98 (R2004), Fall Arresters, Vertical Lifelines, and Rails,

(b) ANSI/ASSE Standard Z359.1-2007, Safety requirements for personal fall arrest systems, subsystems and components, or

(c) CEN Standard EN 353-2: 2002, Personal protective equipment against falls from a height – Part 2: Guided type fall arrestors including a flexible anchor line.

For compliance purposes, fall arresters must bear the mark or label of a nationally accredited testing organization such as CSA, UL, SEI, etc., as evidence that the fall arrester has been approved to the requirements of the Standards. Products bearing a CE mark also comply with this section. The CE mark—Conformité Européenne—indicates that the company manufacturing the product has met the requirements of one or more European directives. The product also complies with the listed CEN European standard.

## **Appendix 18: Self-Retracting Device**

Only self-retracting devices approved to CSA Standard Z259.2.2-98 (R2004), Self-Retracting Devices for Personal Fall-Arrest Systems, are acceptable.

## **Appendix 16: Descent control device 146**

An employer must ensure that an automatic or manual descent control device manufactured on or after July 1, 2009 and used with a personal fall arrest system is approved to

- (a) CSA Standard Z259.2.3-99 (R2004), Descent Control Devices,
- (b) CEN Standard EN 341: 1997, Personal protective equipment against falls from a height – Descender devices, or (c) NFPA Standard 1983, Standard on Life Safety Rope and Equipment for Emergency Services, 2006 edition, classified as general or light duty.

For compliance purposes, descent control devices must bear the mark or label of a nationally accredited testing organization such as CSA, UL, SEI, etc., as evidence that the descent control device has been approved to the requirements of the Standards. Products bearing a CE mark also comply with this section. The CE mark—Conformité Européenne—indicates that the company manufacturing the product has met the requirements of one or more European directives. The product also complies with the listed CEN European standard.

The 2009 edition of the OH&S Code marked the first time that Part 9 accepted fall protection equipment approved to standards from the U.S. and Europe. Fall protection equipment approved to any one of these standards is considered to offer an equivalent level of worker protection. Employers and workers in Alberta now have access to a broader range of equipment to safely meet their fall protection needs.

## **Appendix 17: Life Safety Rope**

An employer must ensure that a life safety rope manufactured on or after July 1, 2009 and used in a fall protection system

(a) is approved to

(i) NFPA Standard 1983, Standard on Life Safety Rope and Equipment for Emergency Services, 2006 Edition, as light-use or general-use life safety rope,

(ii) CEN Standard EN 1891: 1998, Personal protective equipment for the prevention of falls from a height — Low stretch kernmantle ropes, as Type A rope, or

(b) meets the requirements of

(i) CSA Standard CAN/CSA-Z259.2.1-98 (R2004), Fall Arresters, Vertical Lifelines, and Rails, or

(ii) ANSI/ASSE Standard Z359.1-2007, Safety requirements for personal fall arrest systems, subsystems and components.

For compliance purposes, NFPA- and EN- compliant life safety ropes must bear the mark or label of a nationally accredited testing organization such as CSA, UL, SEI, etc., as evidence that the life safety rope has been approved to the requirements of the Standards. Products bearing a CE mark also comply with this section. The CE mark—Conformité Européenne—indicates that the company manufacturing the product has met the requirements of one or more European directives. The product also complies with the listed CEN European standard.

Ropes meeting the requirements of the CSA and ANSI standards are simply required to “meet the requirements of” these standards as these standards are not associated with certification programs. Manufacturers normally “declare” or “self-attest” that their products meet the requirements of the standards. CSA does certify life safety ropes under CSA’s fall arrester standard but only when supplied with a manufactured end termination and supplied with a fall arrester. Users are required to use the rope supplied with the fall arrester. CEN Standard EN 1891 CEN Standard EN 1891: 1998, Personal protective equipment for the prevention of falls from a height.

Low stretch kernmantle rope, applies to low stretch textile rope of kernmantle construction from 8.5 mm to 16 mm in diameter, for use by persons in rope access including all kinds of work positioning and restraint, for rescue and in caving. Low stretch kernmantle ropes are defined as Type A and Type B. Kernmantle rope is a

textile rope consisting of a core enclosed by a sheath. The core is usually the main load-bearing element and typically consists of parallel elements that have been drawn and turned together in single or multiple layers, or of braided elements.

The sheath is braided or woven and protects the core from, for example, external abrasion and degradation by ultraviolet light. Type A rope is designed for general use by persons in rope access including all kinds of work positioning and restraint, rescue and caving.

Type B rope is of a lower performance than Type A rope, requiring greater care in use. Type A rope has the following performance characteristics: (a) elongation (stretch) must not exceed 5 percent under test conditions; (b) static strength without terminations—at least 22 kN; (c) static strength when terminated with a knot or other method—at least 15 kN; and (d) fall arrest peak force must not exceed 6 kN under the test conditions. NFPA Standard 1983 Chapter 5 of NFPA Standard 1983: 2006, Standard on Life Safety Rope and Equipment for Emergency Services, presents requirements for life safety rope.

For compliance purposes, adjustable lanyards for work positioning must bear the mark or label of a nationally accredited testing organization such as CSA, UL, SEI, etc., as evidence that the adjustable lanyard has been approved to the requirements of the Standards. Products bearing a CE mark also comply with this section. The CE mark—Conformité Européenne—indicates that the company manufacturing the product has met the requirements of one or more European directives. The product also complies with the listed CEN European standard.

The 2009 edition of the OH&S Code marked the first time that Part 9 accepted fall protection equipment approved to standards from the U.S. and Europe. Fall protection equipment approved to any one of these standards is considered to offer an equivalent level of worker protection. Employers and workers in Alberta now have access to a broader range of equipment to safely meet their fall protection needs. Readers are referred to section 3.1 for information about previous editions of the standards.

The rope must have the following performance characteristics: (a) elongation must be at least 1 percent but not more than 10 percent at 10 percent of minimum breaking strength; (b) the breaking strength of light use rope must be at least 4500 lbs (20 kN); (c) the breaking strength of general use rope must be at least 9000 lbs (40 kN); (d) light use rope must have a diameter of not less than 3/8 in. (9.5 mm) and not more than 1/2 in. (13 mm); (e) general use rope must have a diameter of not less than 1/2 in. (13 mm) and not more than 5/8 in. (16 mm); and (f) fibre used in rope must have a melting point of not less than 4000 F (2040 C).

CSA Standard Z259.2.1 and ANSI Standard Z359.1 Life safety rope meeting the minimum requirements of these standards is allowed to stretch up to 22 percent when loaded to a force of 8 kN and have a minimum breaking strength of 27 kN.

## **Appendix 18: Adjustable lanyard for work positioning 148**

An employer must ensure that an adjustable lanyard manufactured on or after July 1, 2009 and used by a worker as part of a work positioning system is approved to (a) CSA Standard Z259.11-05, Energy absorbers and lanyards, as a Class F adjustable positioning lanyard, or (b) CEN Standard EN 358: 2000, Personal protective equipment for work positioning and prevention of falls from a height — Belts for work positioning and restraint and work positioning lanyards.

For compliance purposes, adjustable lanyards for work positioning must bear the mark or label of a nationally accredited testing organization such as CSA, UL, SEI, etc., as evidence that the adjustable lanyard has been approved to the requirements of the Standards. Products bearing a CE mark also comply with this section. The CE mark—Conformité Européenne—indicates that the company manufacturing the product has met the requirements of one or more European directives. The product also complies with the listed CEN European standard.

### **Rope Adjustment Device**

An employer must ensure that a rope adjustment device manufactured on or after July 1, 2009 and used by a worker as part of a work positioning system is approved to (a) CSA Standard Z259.2.3-99 (R2004), Descent Control Devices, (b) CEN Standard EN 341: 1997, Personal protective equipment against falls from a height. – Descender Devices, or (c) NFPA Standard 1983, Standard on life safety rope and equipment for Emergency Services, 2006 Edition, classified as general or light duty.

For compliance purposes, rope adjustment devices for work positioning must bear the mark or label of a nationally accredited testing organization such as CSA, UL, SEI, etc., as evidence that the rope adjustment device has been approved to the requirements of the Standards. Products bearing a CE mark also comply with this section. The CE mark—Conformité Européenne—indicates that the company manufacturing the product has met the requirements of one or more European directives. The product also complies with the listed CEN European standard.

## **Appendix 19: Wood pole climbing 149**

An employer must ensure that a worker working on or from a wood pole uses fall restrict equipment that is approved to CSA Standard Z259.14-01, Fall Restrict Equipment for Wood Pole Climbing, in combination with

(a) a lineman's body belt that

(i) is approved to CSA Standard Z259.3-M1978 (R2003), Lineman's Body Belt and Lineman's Safety Strap, or

(ii) complies with section 142.1, or

(b) a full body harness that complies with subsection 142(1). 149(2) Subsection (1) does not apply to fall restrict equipment or a lineman's body belt in use before April 30, 2004

CSA Standard Z259.14-01, Fall Restrict Equipment for Wood Pole Climbing, specifies the requirements for testing the performance and strength of fall restrict equipment for wood pole climbing. Only fall restrict equipment approved to CSA Standard Z259.14-01, Fall Restrict Equipment for Wood Pole Climbing, is acceptable.

For compliance purposes, the equipment must bear the mark or label of a nationally accredited testing organization such as CSA, UL, SEI, etc., as evidence that the equipment meets the requirements of the Standard. Fall restrict equipment in use before April 30, 2004 does not need to be approved to this standard. CSA Standard Z259.3-M1978 (R2003),

For compliance purposes, the body belt must bear the mark or label of a nationally accredited testing organization such as CSA, UL, SEI, etc., as evidence that the equipment meets the requirements of the Standard. This requirement for approval to the Standard does not apply to lineman's body belts in use before April 30, 2004.

## **Appendix 20: Flexible and rigid horizontal lifeline systems**

Because of their complex performance characteristics An employer must ensure that a flexible horizontal lifeline system manufactured on or after July 1, 2009 meets the requirements of (a) CSA Standard Z259.13-04, Flexible Horizontal Lifeline Systems, or (b) the applicable requirements of CSA Standard Z259.16-04, Design of Active Fall-Protection Systems.

CSA Standard Z259.13-04, Flexible Horizontal Lifeline Systems, specifies requirements related to the performance, design, testing, labeling, and provision of pre-engineered flexible horizontal lifeline systems for the attachment of personal fall protection systems. The Standard states design limitations that are necessary for safe and durable service. It also specifies strength requirements for lifeline system anchorages but not strength-testing requirements for these anchorages. CSA Standard Z259.16-04, Design of Active Fall-Protection Systems, is intended for professional engineers with expertise in designing fall protection systems.

The standard specifies requirements for the design and performance of complete active fall protection systems, including Fall Restraint and vertical and horizontal fall arrest systems. The performance characteristics of rigid horizontal fall protection systems are less complex than those of flexible horizontal lifeline systems. Such systems must be designed, installed and used in accordance with (a) the manufacturer's specifications; or (b) specifications certified by a professional engineer.

Manufacturers and designers may wish to refer to Standard Z259.16-04, Design of Active Fall-Protection Systems for helpful advice.

### **Installation of horizontal lifeline systems**

A vital aspect of the safe use of horizontal lifeline systems is that they be installed properly. This section requires that before the horizontal lifeline system is used, it is certified in writing as having been properly installed according to the manufacturer's specifications or the certified specifications of a professional engineer.

This certification of the installation can be performed by a professional engineer, a competent person authorized by the professional engineer, the manufacturer, or a competent person authorized by the manufacturer.

This competent person could be one of the employer's workers, trained and authorized by the lifeline manufacturer to certify the installation. Often overlooked by employers and installers of horizontal lifeline systems is whether or not there is sufficient clearance below the installed system. If there is any doubt, employers should contact the

equipment manufacturer or involve a professional engineer who can assess the available clearance in accordance with the requirements of CSA Standard Z259.16.

## **Appendix 21: Fixed Ladders and Climbable Structures 154**

For fixed ladders and climbable structures constructed and installed after July 1, 2009 an employer must ensure that if a worker is working from or on a fixed ladder or climbable structure at a height of 3 metres or more and is not protected by a guardrail, continuous protection from falling is provided by:

(a) equipping the fixed ladder or climbable structure with an integral fall protection system that meets the requirements of

(i) CSA Standard Z259.2.1-98 (R2004), Fall Arresters, Vertical Lifelines, and Rails, or

(ii) ANSI/ASSE Standard Z359.1-2007, Safety requirements for personal fall arrest systems, subsystems and components, or

(b) an alternate fall protection system.

## **Appendix 22: Boom-supported work platforms and aerial devices**

If no anchor is specified by the manufacturer, an anchor point certified by a professional engineer that meets the requirements of CSA Standard Z259.16-04, Design of Active Fall-Protection Systems must be used.

CSA Standard Z259.16-04, Design of Active Fall-Protection Systems, specifies requirements for the design and performance of complete active fall protection systems. It is intended for professional engineers with expertise in designing fall protection systems.

## **Appendix 23: Leading edge fall protection system 158**

An employer using a leading-edge fall protection system consisting of fabric or netting panels must ensure that

(a) the system can only be used to provide leading edge fall protection. The system cannot be used to provide fall protection for workers at heights above the plane or level in which the system is being installed;

(b) the system must be used and installed according to the manufacturer's specifications, respecting any limitations that the manufacturer may impose on the system during installation and use;

(c) a copy of the manufacturer's specifications for the system must be available to workers at the work site at which the system is being used;

(d) the fabric or netting product must be

(i) drop-tested at the work site as described in 29 CFR Section 1926.502 (C)(4)(i) published by the Occupational Safety and Health Administration (OSHA), i.e., a 182 kg mass (400 lbs) dropped from a height of 107 cm (42 in) onto the fabric or netting, or

(ii) certified as safe for use by a professional engineer; and (e) all workers using the system must be trained in its use and limitations.

(e) all workers using the system are trained in its use and limitations.

## **Appendix 24: Alberta OH&S Code Part 39 Tree Care Operations Application**

This Part applies to arboriculture activities that involve pruning, repairing, maintaining or removing trees or cutting brush if a worker works at height and depends on the tree for support.

Safe work practices.

793(1) An employer must develop and implement safe work practices and procedures that include (a) the assessment of hazards at the work site, (b) worker training, including hazard recognition, (c) the selection, limitation, operation and maintenance of equipment, (d) work positioning and fall protection, and (e) emergency rescue.

793(2) If reasonably practicable, an employer must involve affected workers in the development and implementation of the safe work practices and procedures. AR 87/2009 s793;56/2018 Fall protection and work positioning

794(1) If it is not reasonably practicable to comply with the fall protection requirements of section 139, an employer must ensure that a worker uses a work positioning system.

794(2) A worker must use or wear the work positioning or fall protection system the employer requires the worker to use or wear. Harness standards

795(1) An employer must ensure that a harness manufactured on or after July 1, 2009 and used as part of a work positioning system is approved to (a) NFPA Standard 1983, Standard on Fire Service Life Safety Rope and System Components, 2006 Edition, as a Class II or Class III life safety harness, (b) CEN Standard EN 813: 1997, Personal protective equipment for prevention of falls from a height — Sit harnesses, (c) CSA Standard CAN/CSA-Z259.10-06, Full Body Harnesses, (d) ANSI/ASSE Standard Z359.1-2007, Safety requirements for personal fall arrest systems, subsystems and components, or (e) CEN Standard EN 361: 2007, Personal protective equipment against falls from a height — Full body harnesses. 795(2) Subsection (1) does not apply to harnesses in use before April 30, 2004.

Knot exemption 796

Section 150.3 DOES NOT apply to arboriculture activities to which this Part applies.

150.3 An employer must ensure that a Prusik or similar sliding hitch knot is used in place of a fall arrester only during emergency situations or during training for emergency situations and only by a competent worker.