WORK SAFE BC

2014/10/23-05

THE WORKERS' COMPENSATION BOARD OF BRITISH COLUMBIA

RESOLUTION OF THE BOARD OF DIRECTORS

RE: Amendments to requirements of the *Occupational Health and Safety Regulation* (BC Regulation 296/97, as amended)

WHEREAS:

Pursuant to section 225(1) of the *Workers Compensation Act*, R.S.B.C. 1996, c. 492 and amendments thereto (*"Act"*), the Workers' Compensation Board ("WCB") may make regulations it considers necessary or advisable in relation to occupational health and safety and occupational environment;

AND WHEREAS:

The WCB, pursuant to its mandate under the *Act,* has proposed amendments to the following Parts of the Occupational Health and Safety Regulation ("OHSR"), and has given notice of the proposed amendments, conducted consultations and held public hearings on the following proposed amendments in accordance with section 226(1) of the *Act:*

- General Conditions, section 4.1.1 Snow avalanche assessment – Resolve the implementation issues with the avalanche risk assessment regulations
- General Conditions, section 4.69 Emergency lighting – Update the reference to the BC Fire Code
- Chemical Agents and Biological Agents, sections 5.3 Application and 5.27 Ignition – Update references to repealed *Acts*
- Tools, Machinery and Equipment, new sections – Adopt ANSI standard and add requirements for the safe use of roll on/roll off containers
- Ladders, Scaffolds and Temporary Work Platforms, section 13.32 Work in high risk situations – Update the reference to CSA Standard Z271
- Ladders, Scaffolds and Temporary Work Platforms, section 13.5 Position and stability – Review the safe positioning and stability requirements of portable ladders
- Construction, Excavation and Demolition, section 20.26 Inspections – Clarify when a professional engineer must inspect and certify a gang form

- Construction, Excavation and Demolition, section 20.112 Hazardous materials – Clarify the responsibilities of employers, owners and qualified persons for the safe containment or removal of hazardous materials

- Forestry Operations and Similar Activities, section 26.65 Bullboards – Add new construction, inspection, removal and return to service requirements

- Agriculture, section 28.12 Biohazards exception – Remove an obsolete provision

- Part 34, Rope Access
relating to ensuring that rope access equipment and use are addressed in the OHSR.

AND WHEREAS:

Pursuant to section 228 of the *Act*, a review of the above Parts was undertaken by the WCB as part of the process of ongoing review of and consultation on its regulations to ensure they are consistent with current workplace practices, technological advances and other changes affecting occupational health and safety and occupational environment;

AND WHEREAS:

The Board of Directors, after due consideration of all presentations to the WCB, considers it necessary and advisable in accordance with the WCB's mandate under the *Act* in relation to occupational health and safety and occupational environment, to amend Parts 4, 5, 12, 13, 20, 26, 28 and 34 of the OHSR;

AND WHEREAS:

The WCB must specify the date on which regulations come into force, which date must be at least 90 days after their deposit under the *Regulations Act*, as per section 227 of the *Act*;

AND WHEREAS:

Pursuant to the Provincial Government's *Regulatory Reform Policy,* the BOD has evaluated the proposed regulatory amendments according to the established regulatory criteria.

THE BOARD OF DIRECTORS RESOLVES THAT:

1. The regulatory amendments to the OHSR, as set out in Appendices A to K, are approved;

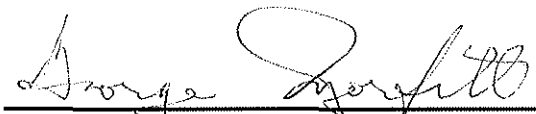
2. The amendments to the OHSR in Appendices A to K come into force on February 1, 2015;

3. The regulatory amendments to the OHSR in Appendices A to K will be deposited with the Registrar of Regulations in such form as may be required by the Registrar;

4. The Regulatory Criteria Checklist in Appendix L is approved.

Dated at Richmond, British Columbia, on October 23, 2014.

By the Workers' Compensation Board



GEORGE MORFITT, FCA
CHAIR, BOARD OF DIRECTORS

APPENDIX A

THE BOARD OF DIRECTORS RESOLVES THAT:

1 *Section 4.1.1 of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is repealed and the following substituted:*

Avalanche risk assessment and safety plan

4.1.1 (1) In this section and section 4.1.2:

"avalanche" means snow avalanche;

"avalanche risk assessment" means the assessment referred to in subsection (2) (a);

"avalanche safety plan" means the plan referred to in subsection (2) (b);

"avalanche safety program" means the program referred to in subsection (6).

(2) Subject to section 4.1.2, if a person working at a workplace may be exposed to a risk associated with an avalanche, the employer must ensure that no work is carried out at the workplace until

(a) a written avalanche risk assessment is completed, and

(b) if the avalanche risk assessment indicates that a person working at the workplace will be exposed to a risk associated with an avalanche, a written avalanche safety plan is developed and implemented.

(3) The avalanche risk assessment must be conducted by a qualified person.

(4) In conducting the avalanche risk assessment, the qualified person must consider all of the hazards and risks associated with an avalanche, including, without limitation, the following:

(a) the topography and vegetation in the area of the workplace;

(b) the snow conditions in the area of the workplace;

(c) the history of avalanches in the area of the workplace;

(d) the nature and duration of work activities to be carried out at the workplace;

(e) the extent, if any, to which the nature and duration of work activities to be carried out at the workplace may affect the topography, vegetation or snow conditions in the area of the workplace;

(f) the nature of the workplace and the buildings and structures at the workplace.

(5) The avalanche safety plan must be developed by a qualified person and, subject to subsection (6), must include measures to eliminate the risks associated with an avalanche.

(6) If eliminating the risks associated with an avalanche is not practicable, the avalanche safety plan must include measures and procedures to minimize those risks, including an avalanche safety program that provides for

(a) the regular monitoring of weather, snow and avalanche conditions in the area of the workplace, at intervals the qualified person considers will be effective,

(b) the implementation of closures or other measures, as specified in the avalanche safety program, and

(c) safe work procedures to be followed by persons working at the workplace.

(7) The employer must make a copy of the avalanche safety program readily available to each person who administers or implements the avalanche safety program for the workplace.

(8) Whenever there is a significant change in the hazards or risks associated with an avalanche in the area of the workplace, the employer must do the following, unless the change is already addressed by the avalanche safety plan:

(a) ensure that a qualified person reviews the avalanche risk assessment and the avalanche safety plan;

(b) make changes to the avalanche risk assessment and the avalanche safety plan, as considered necessary by the qualified person, to reflect the current hazards and risks associated with an avalanche in the area of the workplace.

(9) If the avalanche safety plan includes procedures applicable to a person's work at the workplace,

(a) the employer must provide information and training to the person respecting the procedures, and

(b) the person must comply with the procedures.

Avalanche risk assessment and safety plan exception

4.1.2 (1) Section 4.1.1 does not apply to work carried out to evaluate whether a person working at the workplace may be exposed to a risk associated with an avalanche.

(2) Section 4.1.1 does not apply if compliance with that section is not practicable when carrying out the following types of work at a workplace where a person may be exposed to a risk associated with an avalanche:

(a) work that

(i) is carried out intermittently,

(ii) involves moving through the workplace without stopping for a significant length of time in a particular area of the workplace, and

(iii) has minimal potential to trigger an avalanche;

(b) work related to an emergency;

(c) work carried out to complete an avalanche risk assessment;

(d) work carried out to develop an avalanche safety plan.

(3) Before a person carries out work to which subsection (2) applies, the employer must ensure that

(a) written safe work procedures are in place to minimize the risks associated with an avalanche, and

(b) the person

(i) understands the risks associated with an avalanche, and

(ii) is trained in the procedures referred to in paragraph (a) of this subsection.

(4) The safe work procedures required under subsection (3) must be developed by a qualified person and must set out the following:

(a) the qualifications and training a person must have in order to be eligible to carry out work to which subsection (2) applies;

(b) the procedures the person referred to in paragraph (a) of this subsection must follow to identify and address risks associated with an avalanche;

(c) the requirements the person referred to in paragraph (a) of this subsection must comply with when using equipment.

(5) A person carrying out work to which subsection (2) applies must comply with the safe work procedures required under subsection (3).

*2 **Section 1 comes into force on February 1, 2015.***

Dated at Richmond, British Columbia, October 23, 2014.
By the Workers' Compensation Board

George Morfitt, FCA
Chair, Board of Directors

APPENDIX B

THE BOARD OF DIRECTORS RESOLVES THAT:

1 ***Section 4.69 (4) of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is amended by striking out*** "section 6.8" ***and substituting*** "section 6.5".

2 ***Section 1 comes into force on February 1, 2015.***

Dated at Richmond, British Columbia, October 23, 2014.
By the Workers Compensation Board

George Morfitt, FCA
Chair, Board of Directors

APPENDIX C

THE BOARD OF DIRECTORS RESOLVES THAT:

1 ***Section 5.3 (2) (d) of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is repealed and the following substituted:***

(d) a nuclear substance, within the meaning of the *Nuclear Safety and Control Act* (Canada), that is radioactive, or.

2 ***Section 5.27 is amended***

(a) by adding the following subsection:

(0.1) In this section, **"B.C. Electrical Code"** has the same meaning as in the Electrical Safety Regulation. ***, and***

(b) by striking out "any electrical equipment or installation that is not approved for hazardous locations, as specified by the *Electrical Safety Act*." ***and substituting*** "any electrical equipment or installation that is not approved in the B.C. Electrical Code for use in hazardous locations."

3 ***Sections 1 and 2 come into force on February 1, 2015.***

Dated at Richmond, British Columbia, October 23, 2014.
By the Workers' Compensation Board

George Morfitt, FCA
Chair, Board of Directors

APPENDIX D

THE BOARD OF DIRECTORS RESOLVES THAT:

1 *Part 12 of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is amended by adding the following heading after section 12.174:*

Roll-on/Roll-off Containers .

2 *The following sections are added to Part 12:*

Definitions

12.175 In sections 12.176 to 12.183:

"container safety standard" means *ANSI Standard ANSI Z245.30-2008, American National Standard for Equipment Technology and Operations for Wastes and Recyclable Materials – Waste Containers – Safety Requirements*;

"roll-on/roll-off container" means a container that

(a) is typically used to receive, store and transport refuse, and

(b) is designed to be used with a vehicle equipped with hydraulic or mechanical tilt-frame and hoist-type equipment, commonly referred to as roll-offs or hook-lifts.

Container safety standard

12.176 (1) A supplier of a roll-on/roll-off container manufactured on or after February 1, 2015, must ensure that the container is designed and manufactured in accordance with the requirements of the container safety standard.

(2) Employers must ensure that workers handle roll-on/roll-off containers in accordance with the requirements of the container safety standard.

Protection against specified hazards

12.177 An owner of a roll-on/roll-off container, and an employer, must ensure that persons are not exposed to the following hazards in respect of a roll-on/roll-off container:

(a) the rupture or disintegration, resulting from poor maintenance, of the lifting eye, cables, anchors, latches, doors, guards, hinges or ladder rungs;

(b) being hit or struck by the unintended or premature discharge of any thing or substance collected, used, stored or transported in the container.

Visual inspection before loading container onto vehicle

12.178 (1) Before loading a roll-on/roll-off container onto a vehicle, the driver of the vehicle must

(a) visually inspect the container for defects that may be a hazard, and

(b) ensure that the container doors will not open when the container is moved between the ground and the vehicle.

(2) If the driver identifies a defect in a roll-on/roll-off container that may be a hazard, the driver must immediately inform the following, as applicable, of the defect:

(a) his or her employer;

(b) if the driver has no employer, the owner of the container.

Withdrawal from service

12.179 (1) In this section, **"notified person"** means the person notified under section 12.178 (2) that a roll-on/roll-off container has a defect that may be a hazard.

(2) On receiving notification under section 12.178 (2), a notified person must

(a) withdraw the container from service immediately, or

(b) if it is not practical to withdraw the container from service immediately,

(i) arrange for the safe removal of the container to a place where it can be unloaded, if necessary, and

(ii) have the container repaired.

(3) A roll-on/roll-off container that has been withdrawn from service or repaired under this section may not be returned to service until inspected under section 12.180.

Inspection following repair

12.180 (1) An owner of a roll-on/roll-off container, and an employer, must ensure that a roll-on/roll-off container is inspected by a qualified person after any of the following occur:

(a) significant structural modification or refurbishment;

(b) significant repair of a structural component;

(c) repairs made under section 12.179.

(2) The qualified person must determine whether, following the modification, refurbishment or repairs referred to in subsection (1), the container meets the requirements of the container safety standard.

(3) An inspection under this section must occur on or before the earlier of the following:

(a) 30 days after the making of the modification, refurbishment or repairs referred to in subsection (1);

(b) the return of the container to the place where it is ordinarily stored or located.

Periodic inspection

12.181 (1) An owner of a roll-on/roll-off container, and an employer, must ensure that a qualified person inspects, in accordance with this section, each roll-on/roll-off container to determine if the container meets the requirements of the container safety standard.

(2) The first inspection of a container manufactured before February 1, 2015, or for which the date of manufacture is unknown, must occur as follows:

(a) if section 12.180 applies, as required by that section;

(b) if the container has not previously been inspected under section 12.180, before August 1, 2017;

(c) if the owner or employer, as applicable, acquires the container on or after June 2, 2017, but has no record of it being inspected in accordance with paragraph (a) or (b) of this subsection, within 60 days of acquiring it.

(3) The first inspection of a container manufactured on or after February 1, 2015, must occur as follows:

(a) if section 12.180 applies, as required by that section;

(b) if a container has not previously been inspected under section 12.180, before February 1, 2020;

(c) if the owner or employer, as applicable, acquires the container on or after December 3, 2019, but has no record of it being inspected in accordance with paragraph (a) or (b) of this subsection, within 60 days of acquiring it.

(4) Subsequent inspections of the container must occur within

(a) 30 months of the most recent inspection, whether made under this section or section 12.180, or

(b) a shorter period set by a qualified person, having regard to the condition of the container.

Records of inspection

12.182 An owner of a roll-on/roll-off container, and an employer, must keep a record for each roll-on/roll-off container that includes all of the following:

(a) the date of each inspection made under sections 12.180 and 12.181;

(b) details of any tests conducted, including testing methods and results;

(c) details of any repairs made;

(d) the date before which the next inspection must occur under section 12.181.

Withdrawal from service following inspection

12.183 If a qualified person determines, following an inspection under section 12.180 or 12.181, that a roll-on/roll-off container does not meet the container safety standard, the owner of the container, or the employer, must withdraw the container from service

(a) until it is repaired to meet the container safety standard, or

(b) permanently.

*3 **Sections 1 and 2 come into force on February 1, 2015.***

Dated at Richmond, British Columbia, October 23, 2014.
By the Workers' Compensation Board

George Morfitt, FCA
Chair, Board of Directors

APPENDIX E

THE BOARD OF DIRECTORS RESOLVES THAT:

1 ***Section 13.32 of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is amended by striking out*** *"CSA Standard CAN/CSA Z271-98 (R2003) Safety Code for Suspended Elevating Platforms"* ***and substituting*** *"CSA Standard CAN/CSA Z271-10 Safety code for suspended platforms".*

2 ***Section 1 comes into force on February 1, 2015.***

Dated at Richmond, British Columbia, October 23, 2014.
By the Workers' Compensation Board

George Morfitt, FCA
Chair, Board of Directors

APPENDIX F

THE BOARD OF DIRECTORS RESOLVES THAT:

1 Section 13.5 of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is repealed and the following substituted:

Position and stability

13.5 (1) A portable ladder must

(a) be placed on a firm and level surface, and

(b) be of sufficient length to enable the safe performance of the work activity while being used.

(2) A portable non-self-supporting ladder must,

(a) as shown in Figure 13-1, be positioned so that the ladder is leaning against the vertical plane of support at an approximate angle of 75° when measured from the horizontal plane of support,

(b) if the ladder provides access to or egress from an upper landing,

(i) project approximately 1 m (3 ft) above the upper landing, and

(ii) be sufficiently secured in place to ensure the stability of the ladder during access to or egress from the upper landing, and

(c) if the ladder is not already secured in accordance with paragraph (b) (ii), be sufficiently secured in place to ensure the stability of the ladder during use if conditions exist that are likely to cause the ladder to be unstable.

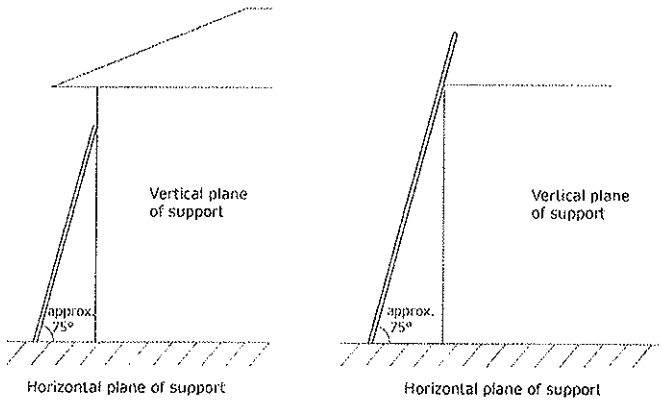


Figure 13-1: Ladder Angle

APPENDIX F

2 Section 1 comes into force on February 1, 2015.

Dated at Richmond, British Columbia, October 23, 2014.
By the Workers Compensation Board

George Morfitt, FCA
Chair, Board of Directors

APPENDIX G

THE BOARD OF DIRECTORS RESOLVES THAT:

1 ***Section 20.26 (3) of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is repealed and the following substituted:***

(3) If a gang form is being reused on the same jobsite with any modification to the gang form design or method of erection, subsection (1) applies in relation to the reuse of the gang form.

(4) If a gang form is being reused on the same jobsite without modification to the gang form design or method of erection certified under subsection (1), immediately before placement of concrete or other intended loading, the employer must ensure that the gang form is inspected by a qualified person who

(a) confirms that the gang form has been erected in accordance with the latest approved erection drawings and supplementary instructions, and

(b) documents the inspection and the confirmation under paragraph (a), including the specific location at which the gang form is being reused and the date of the inspection.

(5) The documents required by subsection (4) (b) must be available at the site for inspection by an officer.

2 ***Section 1 comes into force on February 1, 2015.***

Dated at Richmond, British Columbia, October 23, 2014.
By the Workers' Compensation Board

George Morfitt, FCA
Chair, Board of Directors

APPENDIX H

THE BOARD OF DIRECTORS RESOLVES THAT:

1 Section 20.112 of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is repealed and the following substituted:

Hazardous materials

20.112 (1) In this section:

"hazardous material" means a hazardous substance, or material containing a hazardous substance, including

(a) asbestos-containing material,

(b) lead or any other heavy metal, or

(c) toxic, flammable or explosive material,

that may be handled, disturbed or removed in the course of the demolition or salvage of machinery, equipment, a building or a structure, or the renovation of a building or structure;

"qualified person", except in subsections (7) and (8), means a person who

(a) has, through education and training, knowledge of the management and control of the hazardous materials that the qualified person is made aware of by the employers, and the owner, or that are reasonably foreseeable by the qualified person, as being

(i) on or in the machinery, equipment, building or structure that is the subject of the demolition, salvage or renovation, or

(ii) at the worksite, and

(b) has experience in the management and control of those hazardous materials.

(2) Before work begins on the demolition or salvage of machinery, equipment, a building or a structure, or the renovation of a building or structure, all employers responsible for that work, and the owner, must ensure that a qualified person inspects the machinery, equipment, building or structure and the worksite to identify the hazardous materials, if any.

(3) In conducting an inspection and identifying the hazardous materials, if any, under subsection (2), a qualified person must do the following:

(a) collect representative samples of the material that may be hazardous material;

(b) identify each representative sample and determine whether it is hazardous material;

(c) if the actions under paragraphs (a) and (b) are not practicable, or not appropriate in the circumstances, use other sufficient means to identify the hazardous materials, if any;

(d) based on the actions taken under paragraphs (a) and (b) or (c), determine the location of each of the hazardous materials identified;

(e) make a written report of the inspection, including,

(i) if the actions under paragraphs (a) and (b) were taken,

(A) the location of each representative sample, and

(B) the identity of each representative sample and whether it is hazardous material,

(ii) if the actions under paragraph (c) were taken, the identity of each of the hazardous materials, if any,

(iii) a description of the methods used under paragraph (b) or (c),

(iv) the location, as determined under paragraph (d), of each of the hazardous materials identified, including by using drawings, plans or specifications, and

(v) the approximate quantity of each of the hazardous materials identified.

(4) All employers responsible for work being carried out on the worksite where the demolition or salvage of the machinery, equipment, building or structure, or the renovation of the building or structure is taking place, and the owner, must ensure that the following information is available at the worksite:

(a) a report made under subsection (3) (e);

(b) a report made under subsection (6) (e);

(c) a written confirmation under subsection (8).

(5) All employers responsible for containing or removing any of the hazardous materials identified under subsection (2) or (6) must safely contain or remove those hazardous materials.

(6) If, after written confirmation is provided under subsection (8), a person discovers material that may be hazardous material on or in the machinery, equipment, building or structure or at the worksite, not previously determined to be hazardous material under this section, all employers responsible for the demolition or salvage of the machinery, equipment, building or structure, or the renovation of the building or structure, and the owner, must ensure that a qualified person does the following:

(a) collects representative samples of the material;

(b) identifies each representative sample and determines whether it is hazardous material;

(c) if the actions under paragraphs (a) and (b) are not practicable, or not appropriate in the circumstances, uses other sufficient means to determine if the material is hazardous material;

(d) based on the actions taken under paragraphs (a) and (b) or (c), determines the location of the hazardous material, if any;

(e) makes a written report, including,

(i) if the actions under paragraphs (a) and (b) were taken,

(A) the location of each representative sample, and

(B) the identity of each representative sample and whether it is hazardous material,

(ii) if the actions under paragraph (c) were taken, the identity of the hazardous material, if any, and

(iii) if hazardous material was identified, the location of the hazardous material, including by using drawings, plans or specifications.

(7) All employers responsible for the demolition or salvage of the machinery, equipment, building or structure, or the renovation of the building or structure, and the owner, must ensure that, with respect to the hazardous materials identified under subsection (2) or (6),

(a) no demolition, salvage or renovation work that may disturb the hazardous materials, other than work necessary to safely contain or remove the hazardous materials, is carried out until the hazardous materials are safely contained or removed, and

(b) a qualified person complies with subsection (8).

(8) A qualified person must ensure, and confirm in writing, that the hazardous materials identified under subsection (2) or (6) are safely contained or removed.

2 Section 1 comes into force on February 1, 2015.

Dated at Richmond, British Columbia, October 23, 2014.
By the Workers Compensation Board

George Morfit, FCA
Chair, Board of Directors

APPENDIX I

THE BOARD OF DIRECTORS RESOLVES THAT:

1 *Section 26.65 of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is repealed and the following substituted:*

Cab guard

26.65 (1) In this section:

"cab guard" means a barrier guarding the back of the cab of a log transporter;

"certified welding inspector" means a person who is certified as a Level 2 or Level 3 welding inspector in accordance with *CSA Standard W178.2-08 (R2013), Certification of Welding Inspectors*;

"rated capacity", in relation to a cab guard, means the maximum cargo weight that may be transported by the log transporter and shift and contact the cab guard such that the cab guard is capable of withstanding a horizontal forward static load equal to 40% of that cargo weight, with this load uniformly distributed over the entire cab guard.

(2) For the protection of the driver of a log transporter, the log transporter must have a cab guard that meets all of the following requirements:

(a) subject to subsection (3), the cab guard is at least 15 cm (6 in) higher than the cab;

(b) the cab guard is at least as wide as the cab;

(c) the cab guard has no opening large enough to permit any item of cargo to pass through it;

(d) the cab guard is

(i) constructed with a main supporting structure made of steel, or

(ii) certified by a professional engineer as having a main supporting structure designed and constructed so that vibration and distortion generated by use of the log transporter cannot damage the cab guard;

(e) the cab guard is installed in a manner that ensures that the rated capacity of the cab guard is not diminished.

(3) The cab guard of a self-loading log transporter may be less than the height specified in subsection (2) (a) but must not be less than the cab height.

(4) The weight of cargo that is being transported by a log transporter and that may shift and contact the cab guard must not exceed the rated capacity of the cab guard.

(5) The operator of a log transporter must record the results of the inspection, made before the start of operation on the shift, of the cab guard of the log transporter.

(6) A log transporter must be removed from service if there are any cracks, damage or other conditions that will decrease the rated capacity of the cab guard of the log transporter.

APPENDIX I

(7) A log transporter removed from service under subsection (6) must not be returned to service until

(a) the cab guard is

(i) repaired, and

(ii) inspected and certified to meet the rated capacity by the manufacturer, a professional engineer or a certified welding inspector, or

(b) the cab guard is replaced by a cab guard that meets the requirements of this section.

(8) The cab guard of a log transporter must be

(a) permanently marked with

(i) the name and address of its manufacturer,

(ii) the model number or serial number of the cab guard, and

(iii) the rated capacity of the cab guard, or

(b) identified by carrying in the log transporter a copy of a letter that

(i) accurately describes the cab guard,

(ii) certifies the model number or serial number of the cab guard and the rated capacity of the cab guard, and

(iii) has been signed by the manufacturer or a professional engineer.

*2 **Section 1 comes into force on February 1, 2015.***

Dated at Richmond, British Columbia, October 23, 2014.
By the Workers' Compensation Board

George Morfitt, FCA
Chair, Board of Directors

APPENDIX J

THE BOARD OF DIRECTORS RESOLVES THAT:

1 *Section 28.12 of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is repealed.*

2 *Section 1 comes into force on February 25, 2015.*

Dated at Richmond, British Columbia, October 23, 2014.
By the Workers Compensation Board

George Morfitt, FCA
Chair, Board of Directors

APPENDIX K

THE BOARD OF DIRECTORS RESOLVES THAT:

1 *Section 11.2 of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is amended*

(a) by repealing subsection (4) and substituting the following:

(4) If subsection (3) is not practicable, the employer must ensure that one of the following is used:

(a) a fall arrest system;

(b) a rope access system that meets the requirements of Part 34. , *and*

(b) in subsection (5) by striking out everything before "the employer" *and substituting* "If subsection (4) is not practicable, or will result in a hazard greater than if a fall arrest system or a rope access system was not used,".

2 *The following Part is added:*

PART 34 – ROPE ACCESS

Definitions

34.1 In this Part:

"anchor", also known as an anchorage connector, means a component or subsystem of a rope access system used to connect other parts of the rope access system to an anchorage;

"anchorage" means anything to which an anchor can be connected or secured, including a building, structure, tree or rock;

"full body harness" means a body support device

(a) consisting of connected straps designed to distribute the forces resulting from the suspension or fall of a person over at least the person's thighs, shoulders and pelvis, and

(b) with provision for connecting a lanyard, a rope or other components;

"lanyard" means a flexible length of rope that is used to connect a sit harness or full body harness to other parts of a rope access system or to an anchorage;

"rope" means a length of cord or webbing made of parallel, twisted or braided synthetic fibres or steel wire;

"rope access" means a technique in which a rope access system is used to provide a person with access to and from a workplace, commonly including suspension at the workplace, in such a way that a fall is prevented or arrested;

"rope access system" means a system consisting of

(a) a sit harness or full body harness,

(b) rope, lanyards and other connecting equipment,

(c) anchors, and

(d) other components such as ascenders, descenders, belay devices, backup devices and fall arresters,

that usually employs 2 separately secured subsystems, one as a means of access and the other as a safety, secondary, belay or backup system, but does not include a boatswain's chair, also known as a bosun's chair, or a zipline;

"sit harness" means a body support device consisting of thigh and waist loops.

Scope of application

34.2 (1) Subject to subsection (2), this Part applies to the use of rope access in a workplace.

(2) This Part does not apply to the following:

(a) scaling operations described in sections 20.96 to 20.101;

(b) a climber, as defined in section 26.7.1 (1);

(c) firefighters and firefighting activities under Part 31;

(d) evacuation and rescue, and training in such procedures, under Part 32.

(3) The use of rope access in a workplace is subject to section 11.2.

Rope access plan

34.3 (1) Before a rope access system is installed or used in a workplace, a written rope access plan must be prepared and be available at the workplace.

(2) The rope access plan must include all of the following information:

(a) the hazards associated with the work to be performed;

(b) how the hazards and associated risks will be eliminated or controlled;

(c) a description of the rope access system to be used at the workplace;

(d) a description of the types and locations of the anchorages to be used at the workplace;

(e) the procedures to be used to assemble, maintain, inspect, use and disassemble the rope access system;

(f) the name and duties of each member of the work team;

(g) the appropriate personal protective equipment to be used;

(h) the emergency response, evacuation and rescue procedures.

Training and certification

34.4 (1) Before allowing a person to perform rope access, the employer must ensure and document that the person

(a) has received training in the safe use of a rope access system, including, as appropriate to the work being done, the safe work practices, skills and practical experience hours described in one of the following groups of publications:

(i) *International Code of Practice* (2013) and *General requirements for certification of personnel engaged in industrial rope access methods*,

Edition 6 (June 2009), published by the International Rope Access Trade Association;

(ii) *Safe Practices for Rope Access Work* (August 2012) and *Certification Requirements for Rope Access Work* (November 2012), published by the Society of Professional Rope Access Technicians;

(iii) *Scope of Practice* (2012), *Technical Handbook for Professional Mountain Guides* (1999) and *Climbing Gym Instructor Technical Manual* (2003), published by the Association of Canadian Mountain Guides;

(iv) *Cave Guiding Standards for British Columbia and Alberta* (January 2004), published by the Canadian Cave Conservancy, and *Companion Rescue Workshop* (2011), published by British Columbia Cave Rescue, and

(b) holds a valid certificate of the training referred to in paragraph (a) issued by a body or association referred to in subparagraphs (i) to (iv) of that paragraph.

(2) The certificate referred to in subsection (1) (b) must be available at the workplace and produced for inspection on the request of an officer.

(3) Before allowing a person to perform rope access, the employer must ensure and document that the person is trained in the rope access plan and knows that person's duties under the plan.

Safe work practices

34.5 A person performing rope access must comply with, as appropriate to the work being done, the safe work practices described in one of the groups of publications set out in section 34.4 (1) (a) (i) to (iv).

Two-rope system

34.6 (1) In this section, **"two-rope system"** means a rope access system that includes a working line and a safety, secondary, belay or backup line.

(2) A person performing rope access must use a two-rope system unless one or both of the following apply:

(a) the primary means of support for the person performing rope access is provided by a building, a structure or the ground and not by a rope access system;

(b) in the case of rope access performed

(i) in the course of mountaineering or caving, or

(ii) in a climbing gym,

using a two-rope system may result in a greater hazard than if a single-rope system is used.

(3) In a two-rope system, the working line and the safety, secondary, belay or backup line must

(a) have independent connection points to the system's anchor or anchorage, and

(b) be independently connected to the harness of the person performing rope access.

(4) For the purposes of subsection (3) (b), the working line and the safety, secondary, belay or backup line may be independently connected to a single connection point on the harness of the person performing rope access.

(5) A person must not connect a safety, secondary, belay or backup line to a sternal connection point on the person's full body harness except as permitted by the manufacturer of the harness.

Personal log

34.7 (1) A person who performs rope access must maintain a personal log containing a record of the rope access performed by the person.

(2) The records in the personal log must be kept in chronological order and, unless otherwise provided for in a group of publications set out in section 34.4 (1) (a) (i) to (iv) that is appropriate to the work being done, the entry for each day of work must be verified and signed by the rope access supervisor or the manager in charge.

(3) The records in the personal log must include all of the following information:

(a) the date on which the rope access was performed;

(b) the type of work performed;

(c) the type of rope access system used for the work;

(d) the type of building or structure worked on;

(e) the number of hours worked using rope access.

(4) The person must keep the personal log current and available at the workplace for inspection by an officer.

Rescue

34.8 The employer must ensure that a person performing rope access can be promptly rescued, in accordance with the procedures described in the rope access plan referred to in section 34.3 (1), in the event of an equipment malfunction, a fall or an injury or the person's incapacity to self-rescue.

Equipment

34.9 (1) Equipment used for a rope access system must

(a) consist of components that are compatible and suitable for the intended use, and

(b) be suitable for the environment in which the equipment is used.

(2) Unless otherwise provided for under section 34.12 (1) or 34.13 (2), equipment of a type set out in Column 1 of Schedule 34-A must meet the requirements of, and be used in accordance with, one of the applicable standards set out opposite that type of equipment in Column 2.

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Inspection and maintenance

34.10 Equipment used for a rope access system must be

(a) inspected for defects by a person intending to use the rope access system before the rope access system is first used on each work shift,

(b) inspected in the manner and at the frequency required by the manufacturer of the equipment, and

(c) kept free from substances and conditions that could contribute to the deterioration of the equipment.

Anchors and anchorages

34.11 (1) An anchor for a rope access system must be reliable.

(2) A person must not connect or secure a rope access system to an anchorage unless the anchorage is reliable and capable of safely withstanding any forces that may be applied to the anchorage by persons using the rope access system.

Permanent anchors

34.12 (1) A permanent anchor for a rope access system must have an ultimate load capacity, in any direction in which the load may be applied, of at least 22.2 kN (5 000 lbf) for each person connected to the permanent anchor.

(2) In addition to the requirement under section 34.10 (b) and in accordance with sections 7.3.2, 7.3.3 and 7.4, as applicable, of *CSA Standard Z91-02 (R2013) Health and Safety Code for Suspended Equipment Operations*,

(a) a permanent anchor for a rope access system must be inspected, at least once a year, and tested, and

(b) the results of the inspection and testing must be documented.

(3) A permanent anchor for a rope access system, and its installation, must be certified by a professional engineer.

(4) Subsections (2) and (3) do not apply to a permanent anchor for a rope access system used in the course of mountaineering or caving.

Temporary anchors

34.13 (1) In this section, **"temporary anchor"** means an anchor that is removed from service immediately after use.

(2) A temporary anchor for a rope access system must have an ultimate load capacity, in any direction in which the load may be applied, of at least 12 kN (2 700 lbf) for each person connected to the temporary anchor.

Safety headgear

34.14 Despite section 8.11, a person performing rope access must wear headgear that

(a) is appropriate for the work being done,

(b) is equipped with a chin strap having at least 3 separate points of connection to the helmet shell,

(c) is secured in accordance with the specifications of the manufacturer of the headgear, and

(d) meets the requirements of one or more of the following standards:

(i) *CAN/CSA-Z94.1-05 Industrial Protective Headwear - Performance, selection, care, and use* (published February, 2005);

(ii) *ANSI/ISEA Z89.1-2009 American National Standard for Industrial Head Protection* (published January 26, 2009);

(iii) *EN 12492:2012 Mountaineering equipment. Helmets for mountaineers. Safety requirements and test methods* (published August 31, 2012);

(iv) *EN 397:2012+A1:2012 Industrial safety helmets* (published April 30, 2013);

(v) *UIAA 106 Mountaineering and Climbing Equipment – Helmets* (published January, 2009).

Maximum arrest force, clearance

34.15 (1) In this section, **"maximum arrest force"** means the peak shock load that a rope access system imposes on the body of a person connected to the rope access system when stopping the person's fall.

(2) A rope access system must

(a) limit the maximum arrest force to not more than 6 kN (1 350 lbf), and

(b) minimize the risk of a person connected to the rope access system striking a lower surface or object, or swinging and striking a surface or object, in a manner that could cause injury.

Removal from service

34.16 (1) Equipment used for a rope access system must be removed from service

(a) as specified by the manufacturer of the equipment, or

(b) if the equipment is defective.

(2) Equipment that is removed from service must not be returned to service until it has been inspected and recertified, by the manufacturer or a professional engineer, as meeting the requirements of section 34.9.

APPENDIX K

SCHEDULE 34-A

Standards for Equipment Used in Rope Access Systems

Column 1 **Type of Equipment**	Column 2 **Standards**
Anchors	*CAN/CSA Z259.15-12 Anchorage Connectors* (published January, 2012) *CAN/CSA Z271-10 Safety code for suspended platforms* (published September, 2010) *EN 795:2012 Personal fall protection equipment – Anchor devices* (published September 30, 2013)
Connectors	*ANSI/ASSE 359.12-2009 Connecting Components for Personal Fall Arrest Systems* (published November 16, 2009) *CSA Z259.12-11 Connecting components for personal fall arrest systems (PFAS)* (published November, 2011) *EN 362:2004 Personal protective equipment against falls from a height – Connectors* (published June 30, 2005) *EN 12275:2013 Mountaineering equipment – Connectors – Safety requirements and test methods* (published October 31, 2013) *UIAA 121 Mountaineering and Climbing Equipment – Connectors/Karabiners* (published March 8, 2013)
Energy absorbers	*EN 355:2002 Personal protective equipment against falls from a height – Energy absorbers* (published November 30, 2002)
Harnesses	*CAN/CSA Z259.10-12 Full body harnesses*

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	(published February, 2012) *EN 361:2002 Personal protective equipment against falls from a height – Full body harnesses* (published July 4, 2002) *EN 813:2008 Personal fall protection equipment – Sit harnesses* (published February 28, 2009) *EN 12277:2007 Mountaineering equipment – Harnesses – Safety requirements and test methods* (published August 31, 2007) *UIAA 105 Mountaineering and Climbing Equipment – Harnesses* (published May 30, 2014)
Lanyards	*EN 354:2010 Personal fall protection equipment – Lanyards* (published January 31, 2011)
Rope	*Cordage Institute CI 1801-07 Low Stretch and Static Kernmantle Life Safety Rope* (published October, 2007) *EN 892:2012 Mountaineering equipment – Dynamic mountaineering ropes – Safety requirements and test methods* (published February 28, 2013) *EN 1891:1998 Personal protective equipment for the prevention of falls from a height – Low stretch kernmantel ropes* (published October 31, 1998) *NFPA 1983 Standard on Life Safety Rope and Equipment for Emergency Services, 2012 Edition* (published January 2, 2012) *UIAA 101 Mountaineering and Climbing Equipment – Dynamic Ropes* (published June 26, 2014) *UIAA 107 Mountaineering and Climbing Equipment – Low Stretch Ropes* (published March 8, 2013)

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Rope adjustment devices, including ascenders, back up devices, belay devices, descenders, fall arresters and rope clamps.	*CAN/CSA Z259.2.3-12 Descent devices* (published January, 2012) *EN 341:2011 Personal fall protection equipment – Descender devices for rescue* (published December 31, 2011) *EN 353-2:2002 Personal protective equipment against falls from a height – Part 2: Guided type fall arresters including a flexible anchor line* (published November 30, 2002) *EN 567:2013 Mountaineering equipment – Rope clamps – Safety requirements and test methods* (published September 30, 2013) *EN 12841:2006 Personal fall protection equipment – Rope access systems – Rope adjustment devices* (published February 28, 2007) *UIAA 126 Mountaineering and Climbing Equipment – Rope Clamps* (published March 8, 2013)

3 Sections 1 and 2 come into force on February 1, 2015.

Dated at Richmond, British Columbia, October 23, 2014.
By the Workers Compensation Board

George Morfitt, FCA
Chair, Board of Directors