

2022/10/26-07

# WORKERS' COMPENSATION BOARD (WorkSafeBC)

# RESOLUTION OF THE BOARD OF DIRECTORS

RE: 2022 Amendments to the *Occupational Health and Safety Regulation* and to *Prevention Manual* policy regarding Part 19 of the *OHSR* 

# WHEREAS:

Pursuant to section 110(1) of the *Workers Compensation Act*, R.S.B.C. 2019, c. 1 (*Act*), WorkSafeBC may make regulations it considers necessary or advisable in relation to occupational health and safety and occupational environment;

# **AND WHEREAS:**

Pursuant to section 319 of the *Act*, the Board of Directors of WorkSafeBC must set and revise as necessary the policies of the Board of Directors, including policies respecting occupational health and safety, compensation, rehabilitation and assessment;

# **AND WHEREAS:**

WorkSafeBC, pursuant to its mandate under the *Act*, has proposed amendments to Part 14, Cranes and Hoists and Part 19, Electrical Safety of the *Occupational Health and Safety Regulation*, B.C. Reg. 269/97 (*OHSR*), and has given notice of the proposed amendments, conducted consultations and held public hearings on the following proposed amendments in accordance with section 113(1) of the *Act*:

# **AND WHEREAS:**

Pursuant to section 115 of the *Act*, a review of the above Parts was undertaken by WorkSafeBC 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 occupational environment;

# **AND WHEREAS:**

WorkSafeBC has proposed consequential changes to Item R19.25-1 in the *Prevention Manual* as a result of the proposed amendments to Part 19 of the *OHSR* relating to minimum approach distance when working close to exposed electrical equipment and conductors;

# **AND WHEREAS:**

Pursuant to section 117 of the *Act*, regulations may be made applicable to certain persons, may be different for different categories, may delegate a matter to, or confer a discretion on, the Board, an officer of the Board or another person, and may adopt a standard, code or rule, in whole, in part or with any changes considered appropriate;

# **AND WHEREAS:**

WorkSafeBC, after due consideration of all presentations, considers it necessary and advisable in relation to occupational health and safety and occupational environment to amend Parts 14 and 19 of the *OHSR* and Item R19.25-1 in the *Prevention Manual;* 

# AND WHEREAS:

Pursuant to section 114 of the *Act*, WorkSafeBC must specify the date on which its regulations come into force, which date must be at least 90 days after their deposit under the *Regulations Act*;

# **AND WHEREAS:**

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

# THE BOARD OF DIRECTORS RESOLVES THAT:

- 1. Effective March 1, 2023, the *OHSR* is amended as set out in Appendix A attached to this resolution.
- 2. Effective March 1, 2023, Item R19.25-1 Electrical Safety Working Close to Energized High Voltage Equipment and Conductors, of the *Prevention Manual*, is amended as set out in Appendix B attached to this resolution.

3. This resolution constitutes a policy decision of the Board of Directors.

I, Jeff Parr, hereby certify for and on behalf of the Board of Directors of WorkSafeBC that the above resolutions were duly passed at a meeting of the Board of Directors hosted in British Columbia on October 26, 2022.

Original signed by Jeff Parr

JEFF PARR Chair, Board of Directors Workers' Compensation Board

### APPENDIX A

- 1 Section 14.16.1 (1) of the Occupational Health and Safety Regulation, B.C. Reg. 296/97, is amended in the definition of "misadventure" by repealing paragraphs (a) and (e) and substituting the following:
  - (a) a contact, other than a contact that is consistent with operation as specified by the manufacturer or a professional engineer,
  - (e) an upset, or.
- 2 Section 14.39 is repealed.
- 3 Section 14.49.1 (b) is amended by striking out "physical contact" and substituting "contact between a component or suspended load of the equipment and a component or suspended load of the crane or hoist".
- 4 Section 14.84.1 is amended
  - (a) by repealing subsection (2) and substituting the following:
    - (2) If practicable, an employer must ensure that a tower crane is erected to avoid creating an overlapping operating zone.
  - (b) in subsection (3) by striking out "If it is not practicable to comply with subsection (2)," and substituting "If the operating zone of a tower crane overlaps the operating zone of another tower crane,",
  - (c) in subsection (3) by adding the following paragraph:
    - (c.1) if practicable, each crane must be equipped with and operated under the control of a zone-limiting device with anti-collision control;
  - (d) in subsection (3) (d) by adding "in accordance with subsection (4)" after "written operating procedures", by striking out "collision or interference" and substituting "contact" and by striking out "with a" and substituting "and a",
  - (e) by repealing subsection (4) and substituting the following:
    - (4) The procedures required by subsection (3) (d) must do the following:
      - (a) minimize the time each crane spends in the overlapping operating zone;
      - (b) establish that the lower crane has priority for working in the overlapping operating zone;
      - (c) establish that the operator of the higher crane requires temporary permission from the operator of the lower crane for each lifting sequence in the overlapping operating zone;
      - (d) establish a means and protocol for communication between the operators of the cranes when a crane operates in the overlapping operating zone, including a requirement for the operator of the higher crane to contact the operator of the lower crane before the higher crane enters the zone;
      - (e) establish that, when the lower crane is being operated or when a person is on the lower crane, the higher crane will not pass a load over the lower crane unless
        - (i) the activity meets one or both of the following criteria:

# APPENDIX A

- (A) the higher crane is being used to erect, service or dismantle the lower crane;
- (B) there is a minimum clearance of 18 m (60 ft.) between the underside of the jib of the higher crane and the highest point on the lower crane that is within the tip radius of the higher crane, and
- (ii) written operating procedures for the activity are developed and implemented to ensure the safety of workers. , and
- (f) in subsection (5) (a) by striking out "collision or interference" and substituting "contact" and by striking out "with" and substituting "and".
- 5 Section 16.43 (3) is amended by striking out "14.39,".
- 6 Section 19.24.1 is amended
  - (a) by renumbering the section as section 19.24.1 (1), and
  - (b) by adding the following subsection:
    - (2) If practicable, an employer must ensure that a tower crane operating at a workplace that has exposed electrical equipment or conductors that have a voltage within a range set out in column 1 of Table 19-1A is equipped with a zone-limiting device that prevents the crane from operating in the relevant minimum approach distance to the exposed electrical equipment or conductors set out opposite in column 2.

# APPENDIX B



# PREVENTION MANUAL

RE: Electrical Safety -ITEM: R19.2<mark>4.1</mark>5-1

**Working Close to Energized High Voltage** 

**Equipment and Conductors** 

# **BACKGROUND**

#### 1. **Explanatory Notes**

Section 19.24.1 requires, in part, that employers ensure that a specified minimum distance is maintained between high voltage electrical equipment and conductors and workplace equipment. If this specified minimum safe distance cannot be maintained, section 19.25 requires that an employer must obtain a written assurance of certain matters from a representative of the power system.

#### 2. The OHSR

Section 19.24.1:

- Subject to section 19.24.2, or unless otherwise permitted by this Part, if (1) exposed electrical equipment or conductors at a workplace have a voltage within a range set out in Column 1 of Table 19-1A, the following must remain at least the distance from the exposed electrical equipment and conductors that is set out in Column 2 opposite that range of voltage:
  - a person working at the workplace; (a)
  - (b) a tool, a machine, material or equipment at the workplace.
- If practicable, an employer must ensure that a tower crane operating **(2)** at a workplace that has exposed electrical equipment or conductors that have a voltage within a range set out in column 1 of Table 19-1A is equipped with a zone-limiting device that prevents the crane from operating in the relevant minimum approach distance to the exposed electrical equipment or conductors set out opposite in column 2.

Table 19-1A

Column 1 <b>Voltage</b>	Minimum appro working clos electrical e	Column 2 Minimum approach distance for working close to exposed electrical equipment or conductors	
Phase to phase	Metres	Feet	
Over 750 V to 75 kV	3	10	

March 1, 2023 R19.2<mark>4.1</mark>5-1



# PREVENTION MANUAL

Over 75 kV to 250 kV	4.5	15
Over 250 kV to 550 kV	6	20

Section 19.25, in part:

- (1) If the minimum distance in Table 19-1A cannot be maintained because of the circumstances of work or the inadvertent movement of persons or equipment, an assurance in writing on a form acceptable to the Board and signed by a representative of the owner of the power system, must be obtained.
- (2) The assurance must state that while the work is being done the electrical equipment and conductors will be displaced or rerouted from the work area, if practicable.
- (3) If compliance with subsection (2) is not practicable the assurance must state that the electrical equipment will be isolated and grounded, but if isolation and grounding is not practicable the assurance must state that the electrical equipment will be visually identified and guarded.

. . .

# **POLICY**

The minimum distances specified in section 19.24.1 and Table 19-1A must be taken into account when planning the operation of a crane or other equipment close to overhead electrical conductors. If the operation is planned, with due regard to the environmental conditions, the condition of the equipment, the capability of the operators, and the movement of material, so that no part of the equipment, workers, or material come within the stipulated minimum distance, an assurance in writing under section 19.25(1) is not required.

For the purposes of section 19.24.1, if **it is not practicable to equip a tower crane with a zone-limiting device and** no other effective means is provided to assist the operator of a tower crane in maintaining the minimum distance:

- the crane must have a marker placed at an appropriate position on the jib;
   and
- the employer must specifically instruct the operator that, when the jib is in a
  position such that the load line could enter within the minimum applicable
  distance, the trolley must be positioned only on the mast side of the marker.

March 1, 2023 R19.2<mark>4.1</mark>5-1

# APPENDIX B



# PREVENTION MANUAL

**EFFECTIVE DATE:** October 29, 2003

**AUTHORITY:** 

**CROSS REFERENCES:** HISTORY:

Sections 19.24.1 and 19.25 of the OHSR.

March 1, 2023 - Housekeeping changes to reflect regulation

changes effective on that date.

April 6, 2020 - Housekeeping changes.

February 1, 2011 - Housekeeping changes to reflect regulation changes

effective on that date.

September 15, 2010 - Housekeeping changes to delete practice

reference and make formatting changes.

October 29, 2003 – The policy incorporated a paragraph from then Item

R14.53-1 which was deleted in response to the duplication and

redundancy package of regulatory amendments.

April 1, 2001 - This Item replaced Policy No. 24.04(1) of the former

Prevention Division Policy and Procedure Manual.

This policy applies to all instances where workplace equipment comes in **APPLICATION:** 

close proximity to high voltage electrical equipment and conductors on

and after October 29, 2003.

March 1, 2023 R19.2<mark>4.1</mark>5-1