



Policy, Regulation and Research Department

**Mailing Address**

PO Box 5350 Stn Terminal  
Vancouver BC V6B 5L5

**Location**

6951 Westminster Highway  
Richmond BC

Telephone 604 276-5160  
Fax 604 279-7599

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Update 2023 – 2

**TO: HOLDERS OF THE *PREVENTION MANUAL***

This update of the *Prevention Manual* contains amendments implemented since update 2023 – 01.

The revised pages are amendments for Item R19.25-1 – Electrical Safety – Working Close to Energized High Voltage Equipment and Conductors.

A summary is attached and the amended pages are included as part of the package, effective **March 1, 2023**.

These amended pages and the complete manual are available at

<https://www.worksafebc.com/en/law-policy/occupational-health-safety/ohs-policies>

Ian Shaw  
Head of Law & Policy

Attachments

**PREVENTION MANUAL**  
**Transmittal Sheet for Update 2023 – 2**

<b>Check As Done</b>	<b>Remove Old Pages Numbered/Titled:</b>	<b>Insert New Pages Numbered/Titled:</b>
<input type="checkbox"/>	Pages 1 to 3/ R19.25-1 Electrical Safety- Working Close to Energised High Voltage Equipment and Conductors	Pages 1 to 3/R19.24.1-1 Electrical Safety- Working Close to Energized High Voltage Equipment and Conductors

**RE: Electrical Safety –  
Working Close to Energized High Voltage  
Equipment and Conductors**

**ITEM: R19.24.1-1**

## **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:

- (1) Subject to section 19.24.2, or unless otherwise permitted by this Part, if 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) a person working at the workplace;
  - (b) a tool, a machine, material or equipment at the workplace.
- (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.

**Table 19-1A**

Column 1 Voltage	Column 2 Minimum approach distance for working close to exposed electrical equipment or conductors	
	Metres	Feet
Phase to phase		
Over 750 V to 75 kV	3	10

<b>Over 75 kV to 250 kV</b>	4.5	15
<b>Over 250 kV to 550 kV</b>	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.

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## **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.

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<b>EFFECTIVE DATE:</b>	October 29, 2003
<b>AUTHORITY:</b>	Sections 19.24.1 and 19.25 of the <i>OHSR</i> .
<b>CROSS REFERENCES:</b>	
<b>HISTORY:</b>	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 <i>Policy and Procedure Manual</i> .
<b>APPLICATION:</b>	This policy applies to all instances where workplace equipment comes in close proximity to high voltage electrical equipment and conductors on and after October 29, 2003.