

Indexed as: BCSSAB 10 (1) 12-13

IN THE MATTER OF THE SAFETY STANDARDS ACT  
SBC 2003, Chapter 39

AND IN THE MATTER OF an appeal to the  
British Columbia Safety Standards Appeal Board

BETWEEN:                    A MECHANICAL INSTALLATION COMPANY                    APPELLANT

AND:                         BRITISH COLUMBIA SAFETY AUTHORITY                    RESPONDENT

**REASONS FOR DECISION OF A PANEL OF THE BOARD**

**Introduction**

[1]     The Appellant has brought this appeal to support its contention that an electrical installation permit is not required pursuant to the legislation when a fire alarm panel with no electrical alterations is replaced or if parts in a fire alarm system are replaced.

[2]     In Compliance Order No. CO-2012-0104 issued October 30, 2012; a safety officer disagreed with the Appellant's position and held that an electrical installation permit is required when a fire alarm panel is replaced. At the Appellant's request, the Provincial Safety Manager reviewed the Compliance Order and issued a Review Letter, dated December 17, 2012. The Provincial Safety Manger's review upheld the Compliance Order saying that it was reasonable and issued in accordance with the applicable provisions of the *Safety Standards Act*, SBC 2003, c. 39 (the "Act").

[3]     For ease of reference, in this Appeal, this decision refers to both the Compliance Order No. CO-2012-0104 and the Safety Manager's review as the "Compliance Order."

**Issues**

1.     Is an installation permit required when a fire alarm panel with no electrical alterations is replaced or if parts in a fire alarm system are replaced?

## Position of the Parties

[4] The Appellant submits that no installation permit is required when a fire alarm panel with no electrical alterations is replaced. The Appellant bases its position on section 18(5) of the *Electrical Safety Regulation*, BC Reg 100/204 (the “ESR”) which states:

- 18(5) If a licensed electrical contractor or a manufacturer’s technical representative performs repairs involving the components of existing installed and certified regulated electrical equipment, no permit is required if
- (a) there are no modifications or additions to the electrical installation;
  - (b) neither the electrical rating nor the characteristics of the equipment is altered, and
  - (c) the replacement components are of a type which do not invalidate the original certification mark.

[5] The Appellant submits that a fire alarm system is certified regulated electrical equipment and meets ULC codes.

[6] The Respondent disagrees and submits that section 18(5) of the ESR does not exempt the work at issue from requiring an installation permit. In support of this assertion, the Respondent submits that:

- a) electrical panels for fire alarms are electrical equipment as defined in section 1 of the ESR and are required to be certified in accordance with section 21 of the ESR;
- b) electrical panels for fire alarms are not exempt from installation permit requirements under section 18(2) of the ESR;
- c) under section 18(5) of the ESR, replacement of individual components from an existing piece of installed equipment does not require a permit provided that it does not invalidate the equipment’s certification;
- d) in this case the electrical panel is itself the certified piece of electrical equipment, not a component;
- e) the electrical panel is not a component of a broader fire alarm system as it relates to the ESR as the ESR only applies to electrical equipment as

defined, not a broader “system” including non-electrical equipment and section 18(5) of the ESR refers to components of electrical equipment, not components of a broader system;

- f) the fire alarm system does not have a certification mark applied in accordance with section 21 of the ESR; and
- g) while other codes may govern, safety, operation and functionality of various components of the overall fire alarm system, only the ESR sets out the requirements for electrical safety.

[7] The parties are largely in agreement with respect to the facts before the Board. In support of the Appellant’s position, the Appellant submitted a signed letter outlining its position to the Board. The Respondent submitted the affidavit an acting Provincial Safety Manager-Electrical and written submissions.

[8] Of particular note, the acting Provincial Safety Manager-Electrical deposes in his affidavit that the requirement of taking out a permit as required by the Act is essential to the safety system administered by the Safety Authority. He states that given the volume of regulated work under the ESR that it is not possible to physically assess all instances of such work and that the Safety Authority prioritizes deployment of its resources based on the perceived risk of the installation and that this information is gathered through the permit process.

[9] The acting Provincial Safety Manager-Electrical also deposes that in addition to public safety, when regulated work occurs without the necessary permit that non-compliant contractors can reduce prices and obtain a competitive advantage over their compliant competitors as they do not have to financially contribute to the permit system by paying for an electrical installation permit.

## **Analysis**

[10] This appeal turns on section 18(5) of the ESR. For the Appellant’s alarm panel to qualify for the exception created by section 18(5) of the ESR, four conditions must be met:

1. As required by section 18(5), the fire alarm panel must be a component of existing installed and certified regulated electrical equipment;
2. There must be no modifications or additions to the electrical installation;
3. Neither the electrical rating nor the characteristics of the equipment may be altered; and
4. The replacement components must be of a type that do not invalidate the original certification mark.

[11] In his affidavit, the acting Provincial Safety Manager-Electrical deposes that in the electrical trade that a “component” is generally understood to be part of a piece of equipment such that it takes an assembly of components to constitute a piece of equipment. This definition reflects the definition of “electrical equipment” stated in Section 0 of the CEC, Part I, C22.1-12 which is adopted by section 20 of the ESR:

Electrical equipment – any apparatus, appliance, device, instrument, fitting, fixture, luminaire, machinery, material, or thing used in or for, or capable of being used in or for, the generation, transformation, transmission, distribution, supply, or utilization of electric power or energy, and, without restricting the generality of the foregoing, includes any assemblage or combination of materials or things that is used, or is capable of being used or adapted, to serve or perform any particular purpose or function when connected to an electrical installation, notwithstanding that any such materials or things may be mechanical, metallic, or non-electric in origin.

[12] The Board notes that the Oxford English Dictionary defines “component” to mean a constituent part and that “constituent” is further defined as that which makes up a whole; or an element of a complex whole. These definitions coincide with those submitted by the Respondent from dictionary.com.

[13] Given the position of the parties set out above, much turns on the definitions of “electrical equipment” and “electrical work” in the ESR and “regulated work” in the Act. As set out in the ESR, “electrical equipment” has a different definition than that attributed by section 20 of the ESR:

For the purposes of the Act, “electrical equipment” includes apparatus, conduits, plant, pipes, poles, works and any other regulated product that is used, designed or intended for use for or in connection with the generation, transmission, supply, distribution, or use of electrical energy for any purpose.

[14] Further, “electrical work” is defined as “regulated work in respect of electrical equipment.”

[15] The definition of electrical equipment is important, as for the purposes of this appeal, the regulated product pursuant to sections 1 and 2(b) of the Act is any electrical equipment.

[16] The Act defines “regulated work” to mean:

- a) the assembly, manufacture, construction, installation, operation, testing, maintenance or repair of a regulated product, and
- b) the alteration of a regulated product.

[17] The Board notes that the word “alteration” is defined in the Act to include adding to, replacement and removal. Accordingly, the replacement of a fire alarm panel would be an alteration.

[18] Using these definitions, the four criteria set out above from section 18(5) of the ESA must be considered. First, it must be determined whether the fire alarm panel is a component of existing installed and certified regulated electrical equipment. It is clear from the wording of section 18(5) that not all repairs are exempt from the requirement to obtain a permit and that the exemption is for components of certified regulated electrical equipment. From the evidence before the Board, the Board cannot find that the new fire alarm panels being installed are a component of existing installed and certified regulated electrical equipment. The panel itself is the certified electrical equipment. The fire alarm panel is not a constituent part of a larger regulated product (ie. a larger electrical product). While it may be a component of a larger fire prevention system, it is not a component of the regulated electrical product.

[19] As all four criteria must be met for the exemption to apply, the finding that the alarm system panel is not a component of a larger system is enough to hold that a permit is in fact required. However, for clarity of reasoning, the other three criteria are considered below.

[20] Second, there must be no modifications or additions to the electrical system. Accordingly, the Board must ask whether the replacement of the fire alarm panel is a modification or addition. The Board cannot see how a complete replacement of a panel is not a modification or addition to the existing system. It is certainly an alteration to the system as "alteration" is defined by the SS Act.

[21] Third, neither the electrical rating nor the characteristics of the equipment may be altered. The Board accepts the Appellant's assertion that provided the alarm panels are replaced with similar panels with the same electrical rating that this criteria is met.

[22] Fourth, the replacement parts must be of a type that do not invalidate the original certification mark. The evidence presented to the Board supports a finding that the fire alarm panels bear their own certification mark. Accordingly, it follows that if the panels are removed and replaced with other panels (panels which also bear their own certification mark) that the original certification mark although not necessarily invalidated by the replacement, has been changed.

[23] The evidence before the Board does not support the Appellant's assertion that section 18(5) of the Act exempts the Appellant from the need to apply for a permit when replacing fire alarm panels.

[24] Were there doubt about the application of the exemption granted by section 18(5) of the ESR, the Board's requirement to consider the maintenance and enhancement of public safety pursuant to section 52(1) of the Act would only strengthen the need for a permit. Fire safety is an important and vital component to the public safety system. People rely on fire alarm systems to save lives. Fire alarms are expected to work when needed and it is not unreasonable for the legislation to require regulated workers to apply for permits when replacing such an integral life saving system. As deposed in the acting Provincial Safety Manager-Electrical affidavit, the

process of applying for permits creates a system with checks and balances to create reliance that the work is conducted in accordance with minimum safety standards.

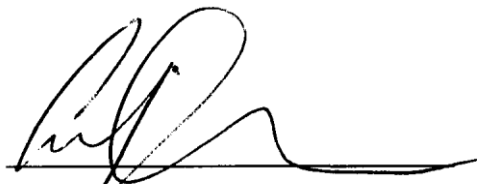
### **Decision**

[25] For the reasons set out above, the Board finds that an installation permit is required as set out in the Compliance Order.


### **Conclusion**

[26] The appeal is dismissed.


Signed:



**Emily C. Drown, Vice-Chair**



**Ted Simmons, Panel Member**



**Tim Haaf**