Canada Appeals Office on Occupational Health and Safety
Bureau d'appel canadien en santé et sécurité au travail

165 Hôtel de Ville, Hull, Quebec, K1A 0J2 – Fax : (819) 953-3326

Canada Labour Code
Part II
Occupational Health and Safety

Gaetan Auger
applicant

and

NA
e*mployer*

Decision No. 03-001
January 9, 2003

Appeals officer Douglas Malanka inquired into the circumstances of the decision of health and safety officer Serge Marion made April 18, 2002 pursuant to subsection 129.(4) of the *Canada Labour Code* (hereto referred to as Part II or the *Code*), that a danger did not exist for Mr. Gaetan Auger. A hearing was held on December 11, 2002, in Ottawa, Ontario.

Appearances

Mr. Gerry McCabe, Heavy Mechanic and Employee Representative of Via Rail Canada Inc. Work Place Health and Safety Committee
Mr. Gaetan Auger, Electrician, Via Rail Canada Inc.
Mr. Elwin Carson, Canadian Auto Workers

Via Rail Company Inc. (VIA) did not participate at the hearing.

Mr. Serge Marion, Health and Safety Officer, Human Resources Development Canada.

[1] On April 10, 2002, following the arrival of VIA Train # 31 at Ottawa, Mr. Auger's supervisor, Mr. Brian Canning, instructed him to verify if the electrical extension cords found in the electrical cabinets of the LRC[1] passenger rail cars in the train could be used to provide electrical power to the refrigerators also located in the rail cars.

[2] While carrying out his assignment, Mr. Auger determined that the electrical extension cords fabricated with 25 gauge wire were connected to the "load" side of the electrical distribution panels instead of the "line" side. Mr. Auger testified that, in this configuration, the 25 gauge wire in the electrical extension cords were only protected by the 100 ampere circuit breakers in the distribution panels. As such, wires in the electrical extension cords

[1] LCR is an acronym for Light, Rapid, Comfortable

and any devices connected to the extension cords would be exposed to a significant over amperage in the event of a short circuit. He explained that the *Canadian Electrical Code*, Part 1, specifies that 25 gauge wire must be protected from an over surge of current by a circuit breaker not exceeding 15 amperes. He further noted that the addition of the electrical extension cords in the rail cars was unauthorized and not identified in VIA drawings.

[3] Mr. Auger explained to Mr. Canning that this was dangerous because the wires in the electrical extension cords or in the appliances or devices attached thereto could overheat and burn if a short circuit occurred. He told him that this could result in a fire, exposure to toxic smoke or exposure to electrical shock. He added that, since the extension cords were physically wrapped with other electrical wires in the electrical distribution panels of the rail cars, other circuits could be damaged and pose additional risks. Mr. Auger stated that the unauthorized electrical extension cords posed a danger for him, other VIA employees and passengers.

[4] Mr. Canning subsequently advised Mr. Auger that VIA decided to have the extension cords removed from its LRC cars during "E" inspections, not because the modification was dangerous, but because it was unauthorized and because the extensions cords were no longer needed. Mr. Canning agreed to permit Mr. Auger to remove the extension cords from the rail cars in Train # 31 if he still felt they were a danger. For his part, Mr. Auger wanted the extension cords removed away across VIA's entire system and warnings given to everyone, including VIA passengers. On April 17, 2002, he refused to work.

[5] Health and safety officer Marion testified that he investigated Mr. Auger's refusal to work the afternoon of April 17, 2002. He stated that Mr. Auger told him that he refused to work because the modification created a danger for him, other employees and passengers.

[6] Following his investigation, health and safety officer Marion decided that a danger did not exist for Mr. Auger. He concluded that it was not reasonable in the circumstances to expect that the hazard posed by the improperly connected extension cords could cause injury to Mr. Auger. He opined that several unlikely circumstances would have had to happen together for a short circuit to occur and it was dubious that this could happen. He noted that the electrical extension cords had been connected in this manner for 8 years without incident of a short circuit or of injury, and that access to the electrical cabinets on the LRC rail cars was limited to authorized personnel. He felt it was more likely that people would remove themselves from the area rather than expose themselves to toxic smoke or the possibility of an electric shock should a short circuit occur.

[7] Despite the fact that health and safety officer Marion decided that a danger did not exist, he was of the opinion that the electrical modification was in contravention of paragraph 8.3(1) of the *Canada Occupational Safety and Health Regulations*, Part VIII, Electrical Safety, and rule 14-000 of the *Canadian Electrical Code*, Part I. He further believed that the contravention was serious enough to warrant the issuance of a direction pursuant to subsection 145.(1) of the *Code*. The direction ordered VIA to correct the contravention within 2 weeks ending on May 2, 2002.

[8] During the hearing, Mr. Auger held that a dangerous short circuit could occur in an extension cord itself, or in any electrical appliance or device connected to an extension cord such as a refrigerator or a vacuum cleaner used by cleaning staff to clean the rail car. He stated that an electrical short could also occur in an electrical distribution panel if an electrical extension cord was used to supply power to the electrical distribution panel from the shore power supply or the locomotive.

[9] Mr. Auger also testified concerning a video cassette which he had submitted prior to the hearing. The video showed an electrical extension cord similar to the one installed on the rail cars being subjected to various current levels. When a current of approximately 60 amperes was applied across the sample electrical extension cord, smoke emanated from the insulation material surrounding the wire. As the amount of current in the wire was seen to rise to 88 amperes, copious amounts of smoke emanated from the cord.

[10] Mr. Carson testified that refrigerators have in fact been connected to the extension cords in the past when electrical power was not being provided by the locomotive or the shore power, and that cleaning staff members have used the extension cords to power their vacuum cleaners.

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[11] According to health and safety officer Marion's report, Mr. Auger refused to work because he felt that the situation with the electrical extension cords created a danger for him, other VIA rail employees or passengers.

[12] However, the right to refuse work is an individual right and section 128 of the *Code* is quite specific with regard to the exercise of that right. Section 128 of the *Code* reads:

> 128.(1) Subject to this section, an employee may refuse to use or operate a machine or thing, to work in a place or to perform an activity, if the employee while at work has reasonable cause to believe that
> *(a)* the use or operation of the machine or thing constitutes a danger to the employee or to another employee, or
> (*b)* a condition exists in the place that constitutes a danger to the employee, or
> (*c*) the performance of the activity by the employee constitutes a danger to the employee or to another employee.

[13] In this case, there was no evidence that Mr. Auger's use of a machine of thing, or performance of an activity, in connection with the extension cords in question could cause injury to another employee. That being the case, the issue I must decide is whether or not the improperly connected electrical extension cords constituted a danger for Mr. Auger.

[14] To decide the matter, I refer to the definition of danger found in section 122.(1) of the *Code*. Section 122.(1) reads:

> "danger" means any existing or potential hazard or condition or any current or future activity that could reasonably be expected to cause injury or illness to a person exposed to it before the hazard or condition can be corrected, or the activity altered, whether or not the injury or illness occurs immediately after the exposure to the hazard, condition or activity, and includes any exposure to a hazardous substance that is likely to result in a chronic illness, in disease or in damage to the reproductive system;

[15] According to the definition, an existing or potential hazard, condition or current or future activity becomes a danger when the hazard, condition or activity could reasonably be expected to cause injury or illness to a person exposed thereto before the hazard or condition can be altered or activity modified. It is evident, therefore, that a hazard, condition or activity can exist in a work place that is not a danger. In such cases, employers are still obliged under the *Code* to ensure that the health and safety of employees is protected. This is indicated in section 124 of the *Code* and reinforced in sections 122.1 and 122.2, and subsection 125.(1). These sections read as follows:

> 124 Every employer shall ensure that the health and safety at work of every person employed by the employer is protected.
>
> 122.1 The purpose of this Part is to prevent accidents and injury to health arising out of, linked with or occurring in the course of employment to which this Part applies.
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> 122.2 Preventive measures should consist first of the elimination of hazards, then the reduction of hazards and finally, the provision of personal protective equipment, clothing, devices or materials, all with the goal of ensuring the health and safety of employees.
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> 125.(1) Without restricting the generality of section 124, every employer shall, in respect of every work place controlled by the employer and, in respect of every work activity carried out by an employee in a work place that is not controlled by the employer, to the extent that the employer controls the activity, …

[16] In the *Correctional Service of Canada – Drumheller Institution and Larry DeWolfe case, Decision No. 02-005, dated May 9, 2002,* I interpreted the definition of danger and believe that the interpretation I made in paragraphs 41 and 42 is applicable in the present case. Paragraphs 41 and 42 read:

> [41] For deciding if a danger exists, the health and safety officer must consider all aspects of the definition of danger and, on completion of his or her investigation, decide if the facts in the case support a finding of danger under the *Code*. This determination must be done on a factual basis and the facts must be persuasive since the right to refuse and danger provisions under the *Code* are considered to be exceptional measures. For a health and safety officer to find that a danger under the

Code exists at the time of his or her investigation in respect of a potential hazard or condition, as in this case, the facts in the case must be persuasive that:

- a hazard or condition will come into being;
- an employee will be exposed to the hazard or condition when it comes into being;
- there is a reasonable expectation that the hazard or condition will cause injury or illness to the employee exposed thereto; and
- the injury or illness will occur immediately upon exposure to the hazard or condition.

[42] It follows that, where a hazard or condition actually exists at the time of the health and safety officer's investigation, the facts in the case must only be persuasive that:

- an employee will be exposed to the hazard or condition;
- there is a reasonable expectation that the hazard or condition will cause injury or illness to the employee exposed thereto; and
- the injury or illness will occur immediately upon exposure to the hazard or condition.

[17] Having reviewed the facts presented in this case, I find that there was minimal risk that a short circuit could develop and it was not reasonable to expect that the improperly connected electrical extension cords could cause injury to Mr. Auger, a competent electrician before the hazard or condition could be corrected. While I accept Mr. Auger's contention that the extension cords constituted a hazard in that they were not adequately protected via a circuit breaker, and this is significant for VIA's accident prevention program, this was not enough for me to make a finding of danger under the *Code*.

[18] Notwithstanding this, I was impressed during the hearing by Mr. Auger's dedication to health and safety. Even though I do not agree with him that a danger existed, he identified a hazard to VIA who subsequently corrected the situation and eliminated the possibility of harm to any person.

[19] Nonetheless, I find that health and safety officer Marion's decision that a danger did not exist for Mr. Auger to have been reasonable and correct in the circumstances and I confirm his decision.

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Douglas Malanka
Appeals Officer

Summary of Appeals Officer Decision

Decision No.: 03-001

Applicant: G. Auger

Respondent: None

Key Words: danger, electrical safety, electrical extension cord, LRC, passenger rail car, unauthorized modification, short circuit, circuit breaker, electrical shock, refrigerator, vacuum cleaner, over amperage, *Canadian Electrical Code*, Part I, January, 1990.

Provisions: C.L.C: 122.(1), 122.1, 122.2, 124, 128, 129
Regulations

Summary:
On April 17, 2002 and electrician with VIA Rail refused to work. He had discovered an unauthorized modification to VIA Rail's LRC passenger rail cars whereby an extension cord had been attached to the electrical distribution panels on the cars. He held that the modification constituted a danger under the *Code* because the circuit was not protected against over amperage. He opined that the extension cord or electrical appliance of device connected thereto could short out and the over amperage could cause a fire or expose a person to toxic smoke or possibly to electrocution.

After hearing and considering the facts in the case, the appeals officer confirmed the decision of the safety officer that a danger did not exist for any person. He found that that there was minimal risk that a short circuit could develop in the electrical extension cords such that it was not reasonable to expect that the improperly connected electrical extension cords could cause injury to the employee a competent electrician.