

Canada Labour Code
Part II
Occupational Health and Safety

Expertech Network Installations
applicant

and

Communications, Energy and
Paperworkers Union of Canada

Decision No. 04-021
June 23, 2004

This case was heard by appeals officer Michèle Beauchamp in Montreal, Quebec, on 30 May 2003.

Appearances

For Expertech

Georges Pharand, Manager, Health, Safety and Environment, Eastern Region
François Méryneau, Manager, Health, Safety and Environment, Quebec Region
Réjean Labrecque, Manager, Vehicle Fleet

For the employees

Christian Comeau, Health and Safety Resources, Canadian Union of Communications, Energy and Paperworkers (CEP)

Health and safety officer

Jessica Tran, Human Resources Development Canada, Investigations Directorate, Montreal, Quebec

- [1] This case concerns an appeal submitted by Expertech Network Installations (Expertech) under the *Canada Labour Code* (“the *Code*”), Part II, against a direction (Appendix A) that health and safety officer Jessica Tran issued pursuant to subsection 145(1) of the *Code* in relation to the Option 11 vehicles that the employer uses.
- [2] According to health and safety officer Tran’s direction, Expertech was contravening paragraph 125(1)(k) of the *Code*, Part II, and paragraph 14.15(a) of the *Canada Occupational Health and Safety Regulations* (COHSR) in that
- the operator station in the platform of the Option 11 vehicle is not equipped with control systems enabling the operator in it to stop the vehicle from moving.

- [3] This direction specifically concerned the Posi Plus “cherry picker”¹ mounted on Option 11 vehicles. These vehicles are equipped with equipment and accessories for installing strands, cables and wires in rural areas, including the cherry picker used to raise and support a technician with the tools and equipment needed for this kind of work. The vehicle, the chassis and the aerial device form a unit designed so that the work can be performed while the vehicle is moving.
- [4] Health and Safety Officer Tran stated at the hearing that she had watched a team of two linemen working with an Option 11 vehicle. One of the workers was the driver of the vehicle on which the aerial device was mounted and the other was the aerial device operator. The vehicle moved ahead while in the platform, which was extended, the worker rolled out cable.
- [5] The health and safety officer mentioned that she had conducted this investigation after she had analysed an accident with this type of vehicle. She had determined at that time that the main cause of the accident had been a communication problem between the vehicle driver and the cherry picker operator. This had led her to conclude that both the vehicle driver and the cherry-picker operator should be able to stop the vehicle from moving when the aerial device is extended and that the cherry-picker should be equipped with a control mechanism for this purpose.
- [6] The health and safety officer stated that she was of the opinion that the Option 11 vehicle, carrying the cherry picker, is “materials handling equipment” as referred to in section 14.1 of the COHSR. She pointed out that the employer operated two types of vehicles, but her direction only concerned the Option 11 type that move while an operator works from the extended aerial platform. She also said that her colleagues, with whom she had discussed the issue, agreed with her interpretation.
- [7] The health and safety officer reaffirmed that, since the whole unit constituted materials handling equipment, both operators, i.e., the vehicle driver and the cherry picker operator, should be able to control both the transport vehicle and the aerial device at all times. As a result, in her words, if the vehicle driver is supposed to be able to stop the movement of the aerial device at all times, the opposite should also be true and the aerial device operator should also be able to stop the vehicle in an emergency – for example, if the vehicle driver should suddenly lose consciousness.

¹The “cherry picker”, designated as an “aerial device (élevateur aérien)” in the employer handbook entitled *Équipement de pose de toron & câble Option 11, Élevateur aérien Posi Plus* Modèle 800* [Posi-Plus Model 800 Aerial Device – Option 11 Strand and Cabling Equipment], also includes a “vehicle-mounted aerial device” of the kind referred to in CSA Standard CAN/CSA-C225-M88, *Vehicle-Mounted Aerial Devices* and its subsequent versions.

- [8] Health and safety officer Tran therefore decided to issue a direction to the employer, since the Option 11 vehicle was equipped with all the devices or controls required to stop the movement of the cherry picker if required, but the aerial platform was not equipped with a button or other control that would allow its operator to stop the vehicle from moving.
- [9] The employer challenged how health and safety officer Tran interpreted the definition of “materials handling equipment” given in section 14.1 of the COHSR. In the employer’s view, it is not the Option 11 vehicle itself which is “materials handling equipment,” but only the aerial device mounted on the vehicle.
- [10] The employer stated that health and safety officer Tran’s main fear seemed to be that the cherry picker operator could not control the movement of the vehicle itself. After discussing the issue with her, the employer then searched in vain for an answer to the question of whether such a device existed or whether a control could be fitted on the aerial platform to control or stop the movement of the vehicle that it was mounted on.
- [11] The employer inquired from the company that supplied the Option 11 vehicles, but the company responded that, to its knowledge, no system existed to control the movement of a vehicle from a cherry picker that was mounted on the vehicle. Furthermore, Bell Canada, which is a part owner of Expertech and which is responsible for the modifications required on these vehicles, as well as their repair and maintenance, was also unsuccessful in locating any kind of system to control a vehicle from a cherry picker mounted on the same vehicle.
- [12] Based on the large amount of feedback received from its technical services and its suppliers, the employer therefore came to the conclusion that, from a technical standpoint, what health and safety officer Tran was asking for did not seem to exist, since no one in the industry could confirm that it did.
- [13] The employer submitted to the hearing various documents supporting its position. The handbook entitled *Équipement de pose de toron & câble Option 11 – Élévateur aérien Posi Plus * Modèle 800* [Posi-Plus Model 800 Aerial Device – Option 11 Strand and Cabling Equipment] gives a very detailed description of the operation, use and safety procedures of the Option 11 vehicle and the cherry picker mounted on it.
- [14] This is the handbook that the employer uses to train its employees and, in this regard, the employer pointed out that, depending on the particular job, both vehicle drivers and cherry picker operators are trained to fill either position, and the handbook provides very clear explanations on the procedures for working alone or in a team.
- [15] The handbook states that [*translation*] “the unit, consisting of the combination of the vehicle, the chassis and the aerial device, is designed to be operated while the vehicle is moving.” In this respect, both the employer and the union representative said that the vehicle speed should not exceed 3 km/hr while an operator is working in the aerial platform.

- [16] The employer also handed to the hearing a letter that the manufacturer of the Posi-Plus Model 800 aerial device had addressed to Bell Canada to explain the operating conditions that the cherry picker operator and the vehicle driver should follow in order to work safely.
- [17] For example, the manufacturer states in the manual that [*translation*]:
- The cherry picker operator and the vehicle driver are both responsible for the movement of the vehicle to ensure a safe working environment at all times when the vehicle is stopped or moving on roads;
 - The operator should also be in auditory contact with the driver and the driver should always maintain visual contact with the operator;
 - Everyone concerned should know the signals used and these should have the same meaning for everyone;
 - The voice communication system should be in good operating condition and should be switched on; the unit should not be operated if the voice communication system is not functioning correctly;
 - The unit should be in good operating condition and all the controls should be operational as they should be;
 - The unit should always move on a stable, firm and levelled surface; it should never be operated on a firm surface with a slope steeper than 5° and the moving speed should never exceed 3 km/h when the operator is in the platform.
- [18] The employer stressed that the Option 11 vehicles are modified so as to provide support for Posi-Plus aerial devices. Moreover, the aerial device is manufactured, installed and operated in compliance with CSA Standard CAN/CSA-C225-M88, *Vehicle-Mounted Aerial Devices*.
- [19] The employer explained that the vehicles are specifically designed to move while the aerial device is extended, so that the operator can feed out the cable from the aerial platform, and the vehicles are not equipped with stabilizers because they move while the cable is being placed.
- [20] Lastly, the employer stated that the real issue that needs to be addressed is to know whether the “materials handling equipment” defined in section 14.1 and subject to the COHSR includes the whole unit, i.e., the Option 11 vehicle with its chassis and aerial device, or whether, as the employer is convinced, it is only the aerial device that is subject to the COHSR.
- [21] Union representative Christian Comeau stated that the health and safety officer’s investigation had made the employees realize that the cherry picker operator was exposed to a hazard that no one had previously thought about – namely, that the cherry picker operator could not stop the vehicle if the driver lost control of it for any reason while the cherry picker was extended. However, the union representative added that, to his knowledge, there had never been an accident involving this particular type of situation.

- [22] Mr. Comeau handed out photos of the operations concerned, including one showing the layout of the emergency buttons on the aerial device. Another one, showing the instrument panel, bore a legend to the effect that, when the gears on the vehicle transmission are engaged, the vehicle moves at 10 km/hr without any pressure from the driver on the accelerator. He said that the driver therefore needs to keep a foot on the brake to maintain a speed of 3-5 km/h.
- [23] The union representative said he agreed with the health and safety officer that it is the whole unit, the Option 11 vehicle and its aerial device, which constitutes the “materials handling equipment” defined by section 14.1 of the COHSR and subject to its Part XIV, since it is the whole unit that is used to move a person, i.e. the cherry picker operator, and an object, i.e. the cable.
- [24] Furthermore, with respect to the direction issued concerning the control systems mentioned in paragraph 14.15a) of the COHSR, Mr. Comeau said that he shared the employer’s opinion that only the vehicle driver needs to be able to control the vehicle’s movement, but that the cherry picker operator should be able to stop the vehicle, if that became necessary.

- [25] In accordance with subsection 146.1(1) of the *Code*, the appeals officer must investigate the circumstances that cause a health and safety officer to issue directions to an employer. Upon completion of the investigation, the appeals officer may, depending on the case, vary, confirm or rescind the directions concerned.
- [26] In this particular case, health and safety officer Tran had concluded that the employer had contravened paragraph 125(1)k) of the *Code*, Part II, and paragraph 14.15a) of the COHSR. These provisions read as follows:

Canada Labour Code

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:

- (k) ensure that the vehicles and mobile equipment used by the employees in the course of their employment meet prescribed standards;

Canada Occupational Health and Safety Regulations

14.15 All motorized materials handling equipment shall be fitted with braking, steering and other control systems that

- (a) are capable of controlling and stopping its movement and that of any hoist, bucket or other part of the equipment;

[27] Health and safety officer Tran gave as the reason for the contravention that

the operator station in the platform of the Option 11 vehicle is not equipped with control systems enabling the operator in it to stop the vehicle from moving.

She emphasized at the hearing that she considered that the whole Option 11 vehicle, and not the aerial device only, as the kind of “materials handling equipment” subject to Part XIV of the COHSR.

[28] I must therefore decide whether the whole Option 11 vehicle, including the Posi-Plus aerial device, is the kind of “materials handling equipment” subject to Part XIV of the COHSR, or whether the term, “materials handling equipment” only applies to the aerial device mounted on the Option 11 vehicle.

[29] I have recently given two decisions² concerning materials handling equipment. These decisions were in response to an appeal submitted by two employers against directions that a health and safety officer had issued concerning mail delivery vans, because he considered that these vans constituted materials handling equipment.

[30] I then undertook an in-depth analysis of the definition given in section 14.1 of Part XIX of the COHSR, as well as of the scope of the exception prescribed in paragraph 14.2(a) with respect to the application of Part XIV. These provisions read as follows:

14.1 « Appareil de manutention » Dispositif, y compris les structures d'appui, le matériel auxiliaire et le gréement utilisé pour transporter, lever, déplacer ou placer des personnes, des matériaux, des marchandises ou des objets. La présente définition exclut les appareils élévateurs installés en permanence dans un bâtiment, mais comprend les appareils mobiles utilisés pour lever, hisser ou placer les personnes.

14.1 “materials handling equipment” means equipment, including its supporting structures, auxiliary equipment and rigging devices, used to transport, lift, move or position persons, materials, goods or things and includes mobile equipment used to lift, hoist or position persons, but does not include an elevating device that is permanently installed in a building.

14.2 La présente partie ne s'applique pas :
a) sous réserve du paragraphe 14.4(4)³, à la mise en service et à l'utilisation de véhicules automobiles sur les voies publiques[.]

14.2 This Part does not apply in respect of
(a) subject to subsection 14.4(4), the use and operation of motor vehicles on public roads[.]

²Decisions No. 03-022 and No. 03-023, Federal Express and Purolator Courier respectively.

³This paragraph requires the installation of a bulkhead in a motor vehicle acquired after July 1, 1995 and having a gross weight of less than 4,500 kg, if there is a likelihood that materials or objects could shift and endanger employees.

[31] I concluded that these vehicles were not “materials handling equipment” and based my decision on different reasons. Here is a summary of some of those reasons that are particularly relevant to the case at hand:

- Generally speaking, the main, basic reason for these vehicles is to transport and move objects or people from one place to another, as opposed to the “handling”, manoeuvring, or manipulation functions of materials handling equipment;
- This transportation function takes place in “open” space, namely, public roads, as opposed to the “closed” or “restricted” space of a warehouse, terminal, tarmac or any other space of the same nature within the workplace in which materials handling equipment moves around;
- The exception created by paragraph 14.2(a) of the COHSR does not mean that these vehicles are always subject to Part XIV of the COHSR, except when they are used and operated on public roads, nor that they automatically become materials handling equipment as soon as they enter a workplace for loading or unloading;
- Paragraph 125(1)(k) of the *Code*, Part II, uses two different terms, “vehicles” and “mobile equipment”, to refer to the COHSR standards that employers are obliged to comply with, which implies that the legislators actually intended to refer to two different types of “equipment”.

[32] In my view, the same rationale applies here. In reality, it is as if we were dealing with two distinct, but juxtaposed, pieces of equipment, that is, on the one hand, the Option 11 vehicle itself, on which, on the other hand, the “actual” materials handling equipment, i.e. the aerial device, is mounted. Moreover, these two pieces of equipment necessarily have to be assembled together to allow the operator to perform his work from the aerial platform.

[33] This opinion is confirmed by the handbook submitted by the employer – *Équipement de pose de toron & câble Option 11 – Élévateur aérien Posi Plus * Modèle 800* [Posi-Plus Model 800 Aerial Device – Option 11 Strand and Cabling Equipment], which specifies various operating conditions for the vehicle itself. This handbook states, in part, that [translation]:

- The driver must possess a valid Class 1 licence to drive a heavy vehicle;
- The driver must be familiar with road signing and workplace protection measures;
- Before operating the vehicle at a normal speed on the road, the driver must ensure that the boom of the cherry picker is retracted and resting solidly in its base;
- When the boom is in extension, the driver must operate the vehicle in accordance with the conditions set by the employer and the Posi Plus aerial device manufacturer, maintain a speed of 3 km/hr at the most, as well as follow the instructions given by the operator in the platform.

[34] This viewpoint is also supported by CSA Standard CAN/CSA-C225-M88, *Vehicle-Mounted Aerial Devices*,⁴ which specifies in section 1 what type of aerial devices the standard applies to.

1 Scope:

1.1

Covers the following types of vehicle-mounted aerial devices used to elevate personnel to job sites above ground:

- (a) telescopic aerial devices;
- (b) aerial ladders;
- (c) articulating aerial devices;
- (d) vertical towers;
- (e) material-lifting aerial devices; and
- (f) any combination of the above.

[35] In addition, point 1.4 of the standard stipulates certain exceptions:

1.4

This standard does not apply to any matter relating to fire-fighting equipment or any matter relating to the vehicles upon which aerial devices are mounted, except that the vehicle being used, while stationary, shall provide a stable and structurally adequate support for the aerial device.

[36] In the case at hand, I have no doubt that the cherry picker is adequately supported by the vehicle it is mounted on, as required by CSA Standard CAN/CSA-C225-M88. It remains then that the vehicle is designed to move along the public highway, while the operator in the aerial platform rolls out the cable, in which case, the vehicle is not equipped with stabilizers.

[37] For the above-mentioned reasons, I believe that the Option 11 vehicle, as such, is not materials handling equipment in the sense of Part XIV of the COHSR, but rather a vehicle covered by the exception stated in paragraph 14.2(a) of the COHSR. In practice, the vehicle's only function is to move along public road, while carrying the cherry picker, with its boom deployed or not, as well as various other accessories and implements for installing strands and cables.

[38] Having said that, there is no doubt that the Posi-Plus aerial device itself is materials handling equipment in the sense of section 14.1 of the COHSR, since its only function is to "transport, lift, move or position persons, materials, goods or things", to lift the cherry picker operator and cables to an above-ground location.

⁴The *Canada Occupational Health and Safety Regulations* do not refer to CSA Standard CAN/CSA-C225-M88, *Vehicle-Mounted Aerial Devices* or to its subsequent versions. I take into account the fact that this standard was presented to me for the hearing and that it has been prepared by a technical committee and approved as a National Standard of Canada by the Standards Council of Canada.

[39] That is why, as health and safety officer Tran requested, the cherry picker must be fitted with control systems as stipulated in paragraph 14.15(a) of the COHSR:

14.15 All motorized materials handling equipment shall be fitted with braking, steering and other control systems that

(a) are capable of controlling and stopping its movement and that of any hoist, bucket or other part of the equipment;

[40] Although Part XIV of the COHSR deals with materials handling equipment, it does not deal with aerial devices mounted on vehicles, as such. Furthermore, it does not say anything about with what control systems motorized materials handling equipment must be equipped, expect to state that they shall be capable of “controlling and stopping its movement and that of any hoist, bucket or other part of the equipment.”

[41] From the outset, I would point out that when section 14.15 is speaking of “its movement,” it is strictly referring to the movement of the materials handling equipment itself and that of “any other part of the equipment.”

[42] In fact, CSA Standard CAN/CSA-C225-M88 stipulates various requirements for the lower and upper controls of aerial devices. Thus in point 4.3.1.1, the standard readily specifies that aerial devices designed to elevate people shall

have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator.

[43] Point 4.3.1.3 of the standard stipulates:

Lower controls shall override the upper controls so that all boom functions can be controlled from the lower controls. When the lower controls are mounted on the vehicle, provision shall be made so that the operator can operate the lower controls while standing on the vehicle.

[44] Lastly, point 4.3.3 of the standard stipulates:

Vehicle-mounted aerial devices used for lifting personnel shall be equipped with an emergency stop device at both the upper and lower control stations to stop all motion. The device shall be within easy reach of the operators, and shall be clearly labelled STOP and be coloured in red.

[45] All the testimony and documents that health and safety officer Tran, the employer and the union representative presented to the hearing show that the Posi-Plus aerial device is equipped with all the control systems required by paragraph 14.15(a) of the COHSR and the CSA standard concerned.

[46] The aerial device is equipped with lower controls, which are located on the door of the pedestal, a structure located at the base of the arms, under the turret. These controls regulate the following operations: the raising or lowering of the lower arm; the rotation, extension and traction of the upper arm, the aerial platform’s position and the rolling out or winding in of cable using the winch on the lower arm.

- [47] In addition, a red master switch that supplies the power for all aerial device operations and which is also used as an emergency stop device is located on the electrical junction box on the front of the pedestal. When the master switch is in the “push” position, the lower and upper controls become non-operational. In the same vicinity, there is also a switch marked “Priority” and “Emergency pump.” If this switch is set to the “Priority” position, the lower controls become operational and the upper controls become non-operational.
- [48] Furthermore, the upper controls, located in the aerial platform, are attached to the side of the platform. These controls include a winch control and an aerial device control. Also, the three arm movements – raising or lowering the lower arm, rotating the upper arm and extending or retracting the upper arm – are operated by a single joystick.
- [49] To prevent the arms of the cherry picker from moving accidentally without any decision on the part of the operator in the aerial platform, the single control is protected by a safety switch, that cuts or feeds the operation valve at the lower control station.
- [50] A red “emergency stop” switch is also mounted on the side of the control box. As soon as it is activated, this switch cuts power to the aerial platform controls.
- [51] It is therefore very clear that the Posi-Plus aerial device is equipped with all the control systems required by paragraph 14.15(a) of the COHSR as by the standard.
- [52] It is also very clear from health and safety officer Tran’s testimony that her main concern lies in the fact that when an operator is working on the aerial platform, he cannot stop the transport vehicle from moving. She was afraid that accidents could happen because of a problem of communication between the vehicle driver and the platform operator, and that was the main reason, as she explained at the hearing, why she issued the direction to the employer.
- [53] Health and safety officer Tran’s concern about communications between the vehicle driver and the platform operator are totally legitimate. However, it clearly emerged from the testimony of the union and employer representatives that communications are truly a part of the work procedures that are both established and taught to employees.
- [54] In this regard, one of the guidelines in the employer’s handbook states that the intercom communication system that is mounted, respectively, near the aerial platform and in the truck cabin is indispensable for the safe operation of the unit. This system must be checked and in good condition before the truck starts to move.
- [55] The employer points out as well that the truck driver must steer the vehicle on the basis of the instructions given to him by the operator in the platform, that the platform operator must look in the direction the vehicle is moving and that the vehicle must move at a slow walking pace.

- [56] The handbook also contains various general safety rules that employees must comply with. For example, the driver must pay attention to truck stability on an inclined road or piece of land, the employees must follow a specific procedure if the truck becomes electrified and different work methods must be followed depending on whether the operator is working alone or with a driver.
- [57] In short, if communication problems persist despite the work procedures and methods that have been set up, I am convinced that the employer, the union and the occupational health and safety committee will be able to diminish and even eliminate them, so long as they continue to collaborate closely, as they showed at the hearing, to ensure the employees' health and safety and prevent the risks inherent in their work.
- [58] Finally, with respect to the Option 11 vehicle, I can only conclude that for all the above-mentioned reasons, that it is a motor vehicle exempted by paragraph 14.2(a) of the COHSR from the application of Part XIV.
- [59] With respect to the aerial device mounted on the vehicle, this is indeed the kind of materials handling equipment that is subject to Part XIV.
- [60] However, since this aerial device is equipped with all the controls required by Part XIV of the COHSR, I am of the opinion, for the above-mentioned reasons, that the employer has not contravened paragraph 125(1)(k) of the *Canada Labour Code*, Part II, and paragraph 14.15(a) of the COHSR in not equipping the aerial platform with a control system that would allow the operator to stop the Option 11 vehicle from moving.
- [61] For all of the above reasons, I rescind the direction issued by health and safety officer Jessica Tran to Expertech Network Installations pursuant to subsection 145(1) of the *Code*.

Michèle Beauchamp
Appeals Officer

**In the Matter of *Canada Labour Code*
Part II — Occupational Health and Safety**

**Direction to the Employer under
Subsection 145(1)**

On 28 January 2003, the undersigned health and safety officer conducted an investigation at the workplace operated by EXPERTECH NETWORK INSTALLATIONS, an employer subject to the *Canada Labour Code*, Part II, and located at 650 Clairevue Boulevard West, St Bruno, Quebec, J3V 6B2, the said work place being sometimes known under the name Expertech Bâtisseur de Réseaux inc.

The said health and safety officer is of the opinion that **the following provision** of the *Canada Labour Code*, Part II, **is being contravened**.

1. 125.(1)(k) of the *Canada Labour Code*, Part II, and 14.15(a) of the *Canada Occupational Health and Safety Regulations*

The operator station in the platform of the Option 11 vehicle is not equipped with control systems enabling the operator there to stop the vehicle from moving.

Therefore, you are HEREBY DIRECTED, pursuant to subsection 145(1)(a) of the *Canada Labour Code*, Part II, to cease all contravention by no later than 24 March 2003.

In addition, you are HEREBY DIRECTED, pursuant to subsection 145(1)(b) of the *Canada Labour Code*, Part II, to take, within the timeframe specified by the health and safety officer the measures mentioned by the officer to prevent continuation or repetition of the contravention.

Issued in Montreal, this 10th day of March 2003.

Jessica Tran
Health and Safety Officer
I.D. #: QC8864

To: EXPERTECH NETWORK INSTALLATIONS
650 Clairevue Boulevard West
St Bruno, Quebec
J3V 6B2

Summary of Appeals Officer Decision

Decision No.: 04-021

Applicant: Expertech Network Installations

Keywords: Materials handling equipment, aerial device, carrier vehicle

Provisions: *Code* 145(1)
Regulations 14.1, 14.2, 14.15

Summary:

A health and safety officer issued a direction to an employer because the operator station of an aerial device mounted on a vehicle was not equipped with control systems that could stop the vehicle from moving.

The appeals officer rescinded the direction because

- the carrier vehicle itself is a motor vehicle exempted by paragraph 14.2(a) of the COHSR from the application of Part XIV;
- the aerial device mounted on the vehicle is definitely materials handling equipment subject to Part XIV; but
- this aerial device was equipped with all the control systems required by Part XIV of the COHSR to control and stop its movement and that of any hoist, bucket or other part of its equipment.