

CANADA LABOUR CODE
PART II
OCCUPATIONAL SAFETY AND HEALTH

Review under section 146 of the Canada Labour Code, Part II
of a direction issued by a safety officer

Applicant: Yellow Freight System
Mississauga, Ontario
Represented by: John Curran, Branch Manager

Respondent: Teamsters, Local 938
Represented by: Al Morrison, Vice-President

Mis en cause: John MacDonald
Safety Officer
Human Resources Development Canada

Before: Serge Cadieux
Regional Safety Officer
Human Resources Development Canada

An oral hearing was held on April 10, 1996 in Mississauga, Ontario.

Background

In a written complaint made in July 1995, an employee of Yellow Freight System alleged that his employer was no longer using wheel chocks at their loading docks. Wheel chocks are normally used as a means of protecting trailers against accidental movement during loading and unloading. In response to the complaint, the safety officer carried out an inspection of the work places of the company and inquired into the activities that take place at the company's warehouse. In his Narrative Report, the safety officer described the issue of wheel chocks in the following manner:

"With respect to wheel chaulks (sic), although no loading or unloading of trailers took place during the inspection, it was confirmed with Mr. MacLauchlan that Yellow Freight does not require employees to use wheel chaulks when loading or unloading trailers with tow motors. Mr. MacLauchlan stated that the company's reasons for not using wheel chaulks were as follows:

The use of wheel chaulks is unnecessary when loading or unloading Yellow Freight trailers because the company has recently installed anchorlok spring brakes on all Yellow Freight trailers.

Activation of a dash mounted control valve activates the spring brakes by exhausting air from the spring brake chamber, permitting spring force to actuate the service brake for positive parking. Yellow Freight System Inc., which is based in the USA, has conducted a study on the effectiveness

of spring brakes, and concluded that the use of spring brakes allows for greater time efficiency in the loading and unloading of trailers than does the use of wheel chaulks, with no negative impact on safety.

Wheel chaulks are still available for use at loading doors designated for use by trailers from other companies, which may not be equipped with spring brakes.

It was agreed that this issue would be reviewed further, and I would inform Yellow Freight shortly as to whether wheel chaulks would be required or not. Mr. MacLauchlan agreed to forward me technical information regrading (sic) spring brakes. This was received on August 11, 1995.

Following consultation with this department, and with the Transportation Safety Association of Ontario, I concluded that, regardless of the type of brake system on the trailers, the use of wheel chaulks when loading and unloading trailers with tow motors is a recognized and well established method of ensuring against accidental trailer movement, and as such, the employer has a general duty under Section 124 of Part II of the Canada Labour Code to ensure that they are used."

A direction (see APPENDIX) was issued under subsection 145(1) of the Canada Labour Code, Part II (hereafter the Code). The safety officer cited Yellow Freight System for a contravention to section 124 of the Code in which the description of the contravention resembles the proposed amendment to Part XIV (Materials Handling) of the Canada Occupational Safety and Health Regulations (hereafter the Regulations).

Submission for the employer

The detailed submission of Yellow Freight System is on record. The written submission of the company addresses the following points:

1. Trailer chocking is obsolete.
2. Trailer chocking creates a greater potential for injury.
3. The Teamster Safety Committee approved the company's discontinuance of trailer chocking.
4. The reliance on trailer chocks to prevent a trailer being pulled away from a dock prematurely is misplaced.

Mr. Curran noted that the wording of the description of the contravention in the direction resembles very much the proposed amendment referred to above but emphasizes that this amendment is not presently in effect and that there is no guarantees that it will come into effect.

Mr. Curran is adamant. The system of blocking is antiquated and was established when single chamber brakes (also known as service brakes) were in use and when round wheels were on the dollies (support legs) of the trailers and these are no longer in place. He explained that every trailer of Yellow Freight System is equipped with flat dolly legs and spring loaded brakes which are according to manufacturer's specifications and are safe for parking.

The documentation submitted by Mr. Curran explains that the difference between the common service brake and the spring brake lies in their operation. The service brake chamber applies the brakes by air pressure and releases them by spring pressure when the brake is released. The spring brake applies the brakes by spring pressure and releases them by air pressure. When trailers were parked using only the action of service brakes, the air pressure could be lost over a short period of time causing the trailer to move under the action of a fork lift truck entering or exiting the trailer during loading or unloading operations. Hence, wheel chocks or blocks were necessary to prevent accidental movement of the trailer.

With the technologically advanced spring brakes, it is no longer necessary to use chocks since those brakes are automatically set upon the disconnection of the trailer or, when the trailer is not disconnected by pressing a dash mounted button which will release the air causing the spring to set the brakes. In fact, trailers manufactured in the U.S. since July 1, 1973 and in Canada since 1976 must have brakes that automatically set upon disconnection of the trailer from the power unit or yard tractor, under the Canada Motor Vehicle Safety Standard (CMVSS) 121, Air Brake Standard and Federal Motor Vehicle Standard (FMVSS) 571.121 (in the U.S.).

In addition to the above, Mr. Curran feels that there is a greater potential for injury by forcing dock workers, hostlers (drivers who shuttle trailers around the yard) or drivers to circulate around moving vehicles and under and around the corners and edges of trailers. With the addition, on all of its vehicles, of a second chamber to the braking system as described above, the company has effectively reduced the accident rate relating to injuries associated with chocking. The company conducted a study which reported a 77% reduction in workers compensation claims. This reduction supports the company's claim that it is providing its employees with a safer workplace.

According to Mr. Curran, there are no records of trailers being pulled away from the docks when the spring brakes are set and there are no injuries associated with that possibility. There are however instances where drivers did drive over the chocks and where chocks became entrapped between the wheels of the trailers, creating a dangerous situation to pedestrians or other drivers. In addition to using the spring loaded brakes at the company own docks, a procedure complements the use of this type of parking brakes in replacement of wheel chocks or blocks.

The employer submitted detailed information in support of the no chocking rule adopted by the company. For example, in the written and oral submissions, the employer made the following points:

- the spring brake represents a significant technological improvement over the service brake and all Yellow Freight System trucks and trailers are equipped with this upgraded brake system. There are two spring brake units per axle;
- the spring brakes are set by pressing a dash mounted button when the truck remains connected to the trailer or they are automatically set upon disconnection of the trailer;
- in a terminal with several doors, the distance between the trailers can, at times, be reduced to less than a foot thereby creating special problems for employees chocking the trailers;

- work at terminals takes place on a 24 hour basis thereby increasing the hazards of having to position chocks in reduced lighting conditions between and under the trailers; there is greater hazards in chocking trailers under those conditions and also by the simple fact that employees chocking trailers are among moving vehicles;
- only Yellow Freight System trailers at the company's terminal would not be chocked; foreign trailers would continue to be chocked or blocked and Yellow Freight System trailers would adhere to chocking policies at other terminals;
- Yellow Freight System Inc. developed and implemented a Chocking of Trailers' procedure (a communication system) which establishes the requirements for safe dropping of trailers without the use of wheel chocks.
- a test was performed at the Atlanta consolidation centre where a forklift truck loaded with a palette weighing approximately 1500 to 2000 pounds to give it traction attempted to push various trailers, some loaded at various degrees, some not, with the spring brakes set. The trailers did not move;
- a study was conducted system-wide by the company and the results indicate a marked reduction in injuries associated with chocking; a 77% reduction in WCB claims was reported as a direct result of upgrading Yellow's fleet to spring brakes;
- spring brakes have been demonstrated to effectively restrain trailers during the loading or unloading operation at the docks;
- in the number of years that Yellow Freight has implemented its no chocking rule, there is not a single instance of an employee of the company being injured as a result of not blocking the trailers. The company's conclusion is that it is less safe to block than not to block trailers that have spring brakes;

Mr. Curran has also entered into evidence testimonies of experts and decisions of regulatory bodies and a union which support the no chocking rule. For example:

- a California Highway Patrol officer enforcing the US Department of Transportation regulations testified that spring brakes are as efficient as blocking the wheels if not more efficient. The officer observed during his inspections that when spring brakes are set, the drivers can hardly or cannot get the truck to move. However, if the wheels are blocked and the spring brakes are not set, they can literally drive over the blocks;
- in the United States, the Department of Consumer Services, Oregon Occupational Safety and Health Division reviewed the issue of the chocking of wheels of over-the-road freight trailers and trucks when they are at loading docks and are being loaded or unloaded by employees on powered industrial trucks. The Oregon OSH Division concluded that there is no need to chock trailers equipped with spring brakes since they were specifically designed for the purpose of preventing trailers from moving while at loading docks. On a more cautious note, the Division also stated that, in the event that a trailer is not equipped with these brakes or they are not

operating properly, the wheels would be required to be chocked. A Compliance Officer would have to document if a hazard exists and if it does, require wheel blocking.

- After being informed of the company's policy to discontinue the chocking of trailers and having been provided with the statistics respecting the reduction in workers compensation claims, the [American] International Brotherhood of Teamsters approved the expansion of the discontinuance.

Submission for the employee

Mr. Morrison expressed some reservation concerning the decisions entered as evidence and the statistics submitted, indicating that they reflect the requirements of American legislation as opposed to the Canadian legislation and therefore it is unfair to compare the two models. Mr. Morrison further explained that while the spring brakes are good brakes, they are only mechanical devices that can be defective and therefore not completely safe. In fact, one mechanic of Yellow Freight System testified that, in several instances, he has detected inadequate spring brake adjustments on some of the company's vehicles. In some cases, the springs are either broken or the adjustments so far out of alignment that the brakes are ineffective.

As far as Mr. Morrison's union is concerned, if the safety aspect of loading and unloading a trailer parked at a dock can be reinforced by chocking, then surely this should be done.

Decision

The safety officer issued a direction under the authority of subsection 145(1) of the Canada Labour Code, Part II (hereafter the Code) for a contravention to section 124 of the Code. Subsection 145(1) and section 124 of the Code provide the following:

145(1). Where a safety officer is of the opinion that any provision of this Part is being contravened, the officer may direct the employer or employee concerned to terminate the contravention within such time as the officer may specify and the officer shall, if requested by the employer or employee concerned, confirm the direction in writing if the direction was given orally.

124. Every employer shall ensure that the safety and health at work of every person employed by the employer is protected.

Therefore, the issue to be decided in this case is whether section 124 of the Code has been contravened. The current Canada Occupational Safety and Health Regulations (hereafter the Regulations) are silent on the issue of preventing accidental movement of trailers in the process of being loaded or unloaded by using chocks or any other means to prevent its movement. In order to be in contravention of section 124, one would have to demonstrate that the employer failed to take the necessary steps to ensure that his/her employees are protected at work. The operative word in this provision is "ensure" which means to make certain.

The safety officer relied heavily on the proposed amendment to Part XIV (Materials Handling) of the Regulations to support his rationale for issuing the direction. That proposed amendment reads as follows:

14.37(2) Where motorized or manual materials handling equipment is required to enter or exit a vehicle other than a railway car to load or unload materials, goods or things to or from the vehicle, the vehicle shall be immobilized and secured against accidental movement by means additional to the vehicle's braking system.

One should keep in mind that, as pointed out by Mr. Curran, there is no assurance that the proposed amendment will ever become law. I must however acknowledge that the proposed amendment is a consensus reached by employer and employee representatives having the best interest of employees at mind and who are well aware of the existence of the spring brakes and their efficiency. In any event, if the proposed amendment becomes law, then compliance with that provision will be mandatory. In the meantime, I will decide the issue on the basis of the facts submitted, not on the proposed amendment.

It has been an accepted practice, in the past, throughout the trucking industry to chock or block trailers to ascertain that trailers being loaded or unloaded do not move. In light of the submission of Yellow Freight System, I must recognize that the chocking or blocking of trailers can be a hazardous task with potentially serious consequences depending on the conditions under which that task is performed. It appears that the chocking or blocking of trailers at Yellow Freight's terminals presents serious problems, possibly due to the large number of trailers being parked in a terminal at a given time or the large number of loading doors at the terminals. The reduction of WCB claims reported in the study conducted by the company is, I am led to believe, related to the chocking of trailers. If this is the case, then obviously another method to prevent the accidental movement of a trailer during loading or unloading operations may have to be implemented.

I accept the argument that spring brakes represent a significant technological improvement over the conventional service brakes. Spring brakes are now used as highly effective emergency brakes. However, they are part and parcel of the braking system and as such they cannot be considered independently from that system. The fact that there are two units per axle is insufficient to make it a fail safe system since the company acknowledged that the majority of its trailers are single axle trailers. Therefore, if one unit fails, the effectiveness of the whole system is compromised.

The argument was made that employees can be injured when chocking trailers during evenings where lighting conditions are reduced. That argument is unacceptable since a minimum amount of lighting is required for employees working under any conditions. Part VI (Levels of Lighting) of the Regulations can be used as a reference. If employees are injured as a result of tripping over or stepping on material lying on the ground, then it would appear that a housecleaning problem also exists and would have to be addressed without delay.

The "Chocking of Trailers" procedure developed by the company to support the no chocking rule is essentially a communication procedure that requires a thorough understanding of the method implemented by all the interested parties. The problem with the procedure is that it varies from one terminal to another depending on the size of the terminal. In some cases, mirrors will be used,

in other cases coloured chains, closed dock doors or safety cones will be used to indicate when it is safe for the hostler to move the trailer. There is however no direct communication between the dock workers and the hostlers and therefore, no means to positively ascertain when the loading or unloading of a trailer is completed.

I also note that both the California Highway patrol officer and the Oregon Occupational Safety and Health Division are not categoric about the use of spring brakes. Of particular interest is the acknowledgement by the Oregon Occupational Safety and Health Division that, in some circumstances, the spring brakes may not be operating properly and that as a consequence, the wheels would be required to be chocked. An inspector would have to document if a hazard exists and if it does, require wheel blocking. In my opinion, that note of caution is very damaging to the proposition that spring brakes can be used as a safety system because it establishes the weakness of the system: spring brakes can fail.

The testimony of the maintenance officer at the hearing is very important in this case because that mechanic testified that he observed broken springs on some of the spring brake units. Evidently, it is impossible to positively determine the condition of the brake by a simple visual inspection. In fact, other than through maintenance, there is no means to verify the integrity of the spring brake other than by experiencing movement of the trailer, a most unacceptable situation. The consequence of the failure of a spring brake during loading or unloading operations can be a serious injury or a fatality if no other method is used to prevent accidental movement of the trailer.

It was indicated that the no chocking rule is highly effective on a surface free of ice and snow. While these conditions may be found to exist in Atlanta, they definitely do not exist in Canada where snow covers the ground for several months of the year. It would also be interesting to observe the effect of the movement of a trailer being loaded or unloaded while parked on another low coefficient of friction surface such as sand, mud or gravel. I believe that it is safe to assume that spring brakes are less effective under the conditions listed above.

Unlike a lock-out device which positively ensures that a particular piece of equipment or machinery is not being used or does not move while someone else uses it, the spring brakes are not fail safe. They are an integral part of the braking system with the advantages and the disadvantages of such a system. In order to make certain that a trailer does not move under loading and unloading conditions, an additional means to prevent the accidental movement of the trailer is, in my opinion, necessary.

Therefore, for all the above reasons, I HEREBY CONFIRM the direction issued on October 5, 1995 under subsection 145(1) of the Canada Labour Code, Part II by safety officer John MacDonald to Yellow Freight System Inc.

Decision rendered on May 30, 1996

Serge Cadieux
Regional Safety Officer

IN THE MATTER OF THE Canada Labour Code
PART II - OCCUPATIONAL SAFETY AND HEALTH

DIRECTION TO YELLOW FREIGHT SYSTEM, INC.
UNDER SUBSECTION 145(1)

On August 9, 1995, the undersigned safety officer conducted an inspection in the work place operated by Yellow Freight System, Inc. being an employer subject to the Canada Labour Code, Part II, at 6130 Netherhart Road, Mississauga, Ontario.

The said safety officer is of the opinion that the following provision of the Canada Labour Code, Part II, is being contravened:

Section 124. of the Canada Labour Code, Part II.

Motorized materials handling equipment is being used to enter or exit tractor trailers at the loading docks in order to load and unload materials, goods or things from the trailers, and the tractor trailers are not being immobilized and secured against accidental movement by means additional to the tractor trailers braking system.

Therefore, you are HEREBY (sic) DIRECTED, pursuant to subsection 145(1) of the Canada Labour Code, Part II, to terminate the contravention no later than October 19, 1995.

Issued at Toronto, this 5th day of October, 1995.

John MacDonald
Safety Officer
1770

To: Yellow Freight System, Inc.
6130 Netherhart Road
Mississauga, Ontario
L5T 1B7

SUMMARY OF REGIONAL SAFETY OFFICER DECISION

Applicant: Yellow Freight System Inc.

Respondent: Teamsters, Local 938

KEYWORDS

Checking, blocking, fail safe, trailer, brakes, spring brakes.

PROVISIONS

Code: 124, 145(1)

SUMMARY

A safety officer gave a direction to a transport company because the company was not securing the movement of trailers being loaded or unloaded against accidental movement by a means additional to the vehicle braking system. The company argued that it was safe not to chock the trailers. They were using the technologically improved spring brake as part of their safety system to prevent the accidental movement of trailers. The Regional Safety Officer found that while the spring brakes are a technological improvement, they are still an integral part of the braking system. A means additional to that system was believed to be necessary. The Regional Safety Officer CONFIRMED the direction.