

CANADA LABOUR CODE
PART II
OCCUPATIONAL SAFETY AND HEALTH

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

Applicant: Canadian National Railway
Represented by: Mr. L.M. Huart, Counsel

Respondent: Mr. R. Scully, Occupational Health and Safety Committee
Canadian National Railway

Mis-en-cause: Richard Shackleton
Safety Officer
Transport Canada, Surface

Before: Douglas Malanka
Regional Safety Officer

Background:

On April 23, 1999, Via Rail passenger train # 74 (Via # 74) departed Windsor, Ontario, at approximately 11:00 hours on route to Toronto, Ontario. The train stopped briefly at Chatham, Ontario, and then obtained clearance from the Canadian National Railway (CN) Rail Traffic Controller to occupy, with restrictions, the North main track through the Chatham Subdivision. The restrictions in clearance order # 43 required Via # 74 to communicate with work train # 319 and with Supervisor Andy Pardy operating in the Chatham Subdivision, and to obtain their permission to proceed. Via # 74 obtained the required permissions and proceeded on the North main track through the Chatham Subdivision at approximately 80 miles per hour, the permitted speed for passenger trains in that Subdivision.

At approximately noon, Via # 74 encountered a hand operated main track crossover switch near Thamesville, Ontario, that was lined in the reversed position¹. The crossover switch caused the train to abruptly veer from the North main track to the South main track. The locomotive rolled over and collided with 3 hopper cars located on a siding adjacent to the South main track. The impact of the collision destroyed the cab of the locomotive and fatally injured the two occupant locomotive engineers. Other Via # 74 employees were also injured in the accident.

¹ According to the Canadian Rail Operating Rules, which are approved by the Minister of Transport and made under the Railway Safety Act for use by federally regulated railways, a switch aligned or "lined" in the "reversed position" is "set for a diverging route" or "other than normal route." Conversely, a switch lined in the "normal position" is "set for the main track" or "normal route."

Following a lengthy investigation, safety officer Shackleton issued a direction to CN on March 14, 2000, pursuant to subsection 145.(1) of the Canada Labour Code, Part II², (hereto referred to as the Code or Part II). The direction ordered CN to protect employees operating over its main track in Occupancy Control System (OCS) territory by ensuring that main track switches are properly lined and locked by April 15, 2000. See appendix. On March 17, 2000, CN requested that the direction be reviewed and rescinded by a Regional Safety Officer. A hearing was held September 26, 2000, at Mississauga, Ontario.

Safety Officer:

The investigation Report issued by safety officer Shackleton will not be reproduced here but forms part of the record. I retain the following from his Report and testimony at the hearing.

Safety officer Shackleton explained that train movement in OCS territories (sometimes referred to as dark territories) is controlled by oral, hand copied authorities and clearances given by Rail Traffic Controllers. He said that, unlike the Centralized Traffic Control (CTC) system where train movement is controlled by electronic signal, there are no electronic signals under OCS to indicate the status of main track switches.

He held that switches are subject to human error and vandalism and so a system of advance warning is needed in OCS territories to alert train crews that a switch in front of them may be in the reversed position. He said that the advance warning, such as that provided by the CTC system, would enable crews to stop their train before crossing a switch in the reversed position.

Safety officer Shackleton testified that he conducted tests to determine if a high speed passenger train operating in an OCS territory has sufficient time to stop after detecting a switch in the reversed position. He observed that, depending on track and weather conditions, a high speed train might only have from 4 to 7 seconds to stop after detecting a switch in the reversed position. He held that this was insufficient to stop the train before it crossed the switch.

He further testified that he relied on statistics obtained from Transport Canada for issuing his direction. He said that statistics indicated that there were 99 occurrences during the period of 1994 to 1998 where switches were lined in the reversed position. He said that approximately 53 of these occurrences occurred on main tracks in OCS territories.

Safety officer Shackleton said that he issued his direction because a train crew operating in OCS territories has no advance warning that the switch in front of them is in the reverse position that would enable them to stop their train before crossing the switch. He held that, while the derailment involved a Via Rail passenger train, CN operates trains over the same tracks and so the accident affected their employees.

² Recent amendments to the Canada Labour Code came into force on September 30, 2000, after the direction which is the subject of review. Consequently, the version of the Code in force at the time of the direction applies.

Evidence Proffered On Behalf of Employer:

Mr. E.H. Laks, General Manager Operations, CN, proffered documents at the hearing and testified on behalf of CN. I retain the following from the documents and his testimony.

Mr. Laks testified that there was a lot of debate at CN following the Thamesville accident. CN finally concluded that compliance with rule 104 of the Canadian Rail Operating Rules (CRORs) is more than sufficient to ensure operational safety. Rule 104 reads:

“104. Hand Operated Switches

104.(a) Except as provided in paragraph (b), main track switches must be lined and locked for the main track when not in use. A main track hand operated switch must display a reflectorized target, or light and target, to indicate the following:” [My underline.]

He explained that the CRORs are government legislated authorities or rules that govern railway operations in Canada. CN distributes its own version of the CRORs to its employees that includes special instructions related to CN operations and precludes irrelevant rules. Mr. Laks confirmed that CN employees are trained and tested on the CRORs rules every 3 years or less.

Notwithstanding this position, Mr. Laks said that, since the accident involved passenger service, and since the Grimsby and Chatham Subdivisions remained the only high density, high speed, dual main track passenger corridor not served by CTC, CN decided to provide an extra degree of safety for passengers in these Subdivisions. He said that CTC would be installed in these two subdivisions by the end of October, 2000.

Mr. Laks testified that CN had instituted, or was in the process of instituting, several other measures to address human factors and vandalism relative to its hand operated main track switches in non-signal controlled OCS territories. For example, CN verified on a system wide basis that all hand operated main track switches are secured with high security locks and that they are vandal proof. CN also computerized its inventory of numbered high security lock keys, and spiked and removed infrequently used switches on main tracks.

In addition, CN reviewed the visibility of main track switch targets used in OCS territories and instituted changes. In this regard, CN enlarged its main track switch targets on its low stand switches and opted, on a system wide basis, to increase the visibility of its main track switch targets by the use of diamond grade, highly reflective material. He stated that the higher reflected material improved target recognition by 400 percent in respect of distance and night time operations. He held that the increased size of the targets further improved overall visibility in the order of 40 percent.

Notwithstanding the improvements, Mr. Laks conceded that, depending on train size, speed and weather, main track switch targets may not provide early enough warning for train crews to stop a train before crossing an improperly aligned switch. But he insisted the crews would be able to dramatically reduce the speed of their train before entering an improperly aligned switch and

thereby mitigate the incidence. He did not indicate that mitigating an accident would avoid personal injury to employees.

Mr. Laks testified that CN has issued system wide bulletins to employees who handle switches to clarify rule 104 of the CRORs and to remind them to check the position of all hand operated switches. In its Ontario region, CN established a formalized communication protocol requiring employees to double check the position of switches. In accordance with the formalized protocol, an individual who operates a switch must immediately go to the crew member operating the train and, before they leave the switch, confirm the position of the switch in a face to face communication. The protocol also requires crew members, system wide, to communicate the position of switches to trains authorized through their work clearance limits, and to the Rail Traffic Controller upon cancellation of a work authority.

Mr. Laks confirmed that CN continues to issue reminder notices to employees on a regular basis regarding CRORs 104 and 309, and is in the process of developing rules training for their formal communication protocol. He said that CN developed and instituted a quality assurance program to ensure compliance with the corrective measures instituted. The quality assurance program includes regular field audits and documents the frequency of non-compliance. He added that action is taken promptly where non-compliance is observed.

Mr. Laks dismissed the statistics relied upon by safety officer Shackleton for his direction because:

- of the 99 occurrences of switches lined in the reversed position, only 21% of the incidents took place on CN track;
- 47% of the incidents occurred in CTC territory showing that signaled switches do not guarantee that switches are lined properly; and,
- the majority of incidents occurred in yards tracks where the speed is slow and not on main tracks.

Evidence Proffered On Behalf of Employees:

Mr. Scully agreed that increasing the size and reflectivity of the switch targets improved their visibility and ensured that operating crews could react faster to switches lined in the reversed position. He doubted that a train traveling at 80 miles per hour could stop before crossing a switch lined in the reversed position, but conceded that the speed could be significantly reduced. He also confirmed that the communication protocols regarding the operation of switches in dark territories had been reinforced at CN, and that field audits regarding compliance with the new protocols have been instituted.

Summations:

Mr. Huart argued that the direction should be rescinded because it is *ultravires*. He held that the Rail Safety Act applies in respect of rail safety and establishes rules and regulations appropriate to safe rail operations. He pointed out that Transport Canada exercised its jurisdiction 7 days following the accident and issued a Notice to CN under section 31 of the Railway Safety Act. He insisted that Transport Canada's tacit acceptance of the remedial

measures CN undertook in respect of the section 31 Notice established that the matter was properly regulated under the Railway Safety Act.

He also held that safety officer Shackleton should have withdrawn from his investigation of the train derailment when he learned that the accident was being investigated by the Transportation Safety Board of Canada (TSB) pursuant to the Canadian Transportation Accident Investigation and Safety Board (CTAISB) Act. He insisted that the Board has the exclusive jurisdiction to investigate transportation accidents and incidences for determining their causes and contributing factors. He argued that the direction is *ultravires* because safety officer Shackleton identified human factors or vandalism as a possible cause and contributing factor of the accident and thereby exceeded his jurisdiction when he issued his direction.

Mr. Huart further argued that the Code applies in respect of employment safety and not to railway operational safety. He accepted that section 125 of the Code establishes minimum standards specific to employee health and safety and can apply in respect of rail operating employees where there is a contravention of one of the standards specified therein. However, he held that CN can not be in violation of section 124 of the Code if it is in compliance with the Railway Safety Act and pursuant regulations. He further argued that section 124 is equivalent to a finding of danger and insisted that there was no danger when safety officer Shackleton issued his direction. He added that the direction issued by safety officer Shackleton referred to a contravention in the past, whereas section 145.(1) of the Code refers to ongoing contraventions.

Mr. Huart finally argued that the direction should be rescinded because it does not specify the nature of the contravention and CN has no way of knowing what it must do to comply. He stressed that CN only converted the Grimsby and Chatham from OCS control to CTC to add an additional level of security. He insisted that this action did not confirm that the CRORs are inadequate to ensure safe rail operations or that CN was not protecting its employees.

Reason For Decision:

Issue(s):

There are 3 issues before me. The first issue is whether or not safety officer Shackleton is authorized under subsection 145.(1) of the Code to issue the direction he issued given that TSB is investigating the accident pursuant to the CTAISB Act and Transport Canada is pursuing the matter under the Railway Safety Act. If I find that he is so authorized, I must then decide if CN was in contravention of section 124 of the Code. If I find that CN was not in contravention of section 124, then I must decide if the evidence establishes that CN was in contravention of any other provision of the Code. Subsection 146.(3) of the Code authorizes me to vary a direction.

Applicable Legislation:

- Paragraph 122.1 of the Code which reads:

"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."
[My underline.]

- Paragraph 123.1(a) of the Code which reads:

“123.1(a) Notwithstanding any other Act of Parliament or any regulations thereunder, this Part applies to and in respect of employment

(a) on or in connection with the operation of any federal work, undertaking or business other than a work, undertaking or business of a local or private nature in the Yukon Territory or Northwest Territories;” [My underline.]

- Paragraph 124 of the Code which reads:

“124 Every employer shall ensure that the safety and health at work of every person employed by the employer is protected.” [My underline.]

- Paragraph 125.(c) of the Code which reads:

“125 Without restricting the generality of section 124, every employer shall, in respect of every work place controlled by the employer standards)]”

(c) investigate, record and report in the manner and to the authorities as prescribed all accidents, occupational diseases and other hazardous occurrences known to the employer;”

- Section 145.(1) of the Code which reads:

“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.” [My underline.]

- Subsection 146.(3) of the Code which reads:

“146.(3) The regional safety officer shall in a summary way inquire into the circumstances of the direction to be reviewed and the need therefor and may vary, rescind or confirm the direction and thereupon shall in writing notify the employee, employer or trade union concerned of the decision taken.” [My underline.]

- Paragraph 11.3(a) of the On Board Trains Occupational Safety and Health Regulations which reads:

“Where an employer is aware of an accident, occupational disease or other hazardous occurrence affecting any of his employees in the course of employment, the employer shall without delay

(a) take necessary measures to prevent a recurrence of the hazardous occurrence;... ”
[My underline.]

- Paragraph 14.(4)(a) of the Canadian Transportation Accident Investigation and Safety Board Act which reads:

“Nothing in subsection (3)

(a) prohibits a department from commencing an investigation into or continuing to investigate a transportation occurrence for any purpose other than that of making findings as to its causes and contributing factors, or from investigating any matter that is related to the transportation occurrence and that is not being investigated by the Board...”

Rationale:

The first issue that I will address is whether safety officer Shackleton is authorized under subsection 145.(1) of the Code to issue the direction he issued given that TSB is investigating the accident pursuant to the CTAISB Act and Transport Canada is pursuing the matter under the Railway Safety Act.

Mr. Huart held that the Railway Safety Act regulates safe railway operations and, unless there is a violation of one of the prescribed standards specified in section 125 of the Code, the Railway Safety Act prevails. However, this view appears to suggest that the two statutes have identical objectives, or that the Railway Safety Act somehow incorporates the objectives of Part II. According to section 122.1 (purpose clause) of the Code, the purpose of the Code is to prevent accidents and injury to health arising out of, linked with or occurring in the course of employment. Whereas, the general purpose of the Railway Safety Act is to ensure the safe operations of railways. While the two federal objectives may share the same industry and workplace, and generally buttress each other, Parliament established in 1984 that the occupational health and safety of transport operating employees is distinct and separate from operational safety. Moreover, Parliament indicated the high importance it assigned to employment health and safety, including that of transport operating employees, when it made the Code applicable notwithstanding any other Act.

For his part, safety officer Shackleton was of the opinion that CN’s compliance procedures, including the modifications reported to Transport Canada following the accident, did not protect the occupational health and safety of operating crews operating in CN’s other OCS territories. On that basis, he issued a direction to CN under subsection 145.(1) of the Code, which, in my opinion, he is authorized to do.

Mr. Huart also held that the TSB has primary and exclusive authority for investigating transportation accidents and incidents for determining their causes and contributing factors. He insisted that for safety officer Shackleton to have issued his direction under section 124, he had to have identified the causes and contributing factors of the accident, which he is prohibited from doing under the CTAISB Act. He opined that safety officer Shackleton should have terminated his investigation as soon as he failed to identify a contravention under section 125 of the Code.

I have two concerns with this position. First, the CTAISB Act does not prohibit any other federal department or agency from investigating a transportation accident or incident for the purpose of

any other Act of the Parliament of Canada. That is, notwithstanding the importance that Parliament assigned to having transportation accidents or incidents investigated by an independent agency for determining their causes or contributing factors, Parliament recognized and accepted that other statutes may have to operate concurrently.

Secondly, there is no disagreement that the CTAISB Act provides the Board with exclusive authority for making findings regarding the causes and contributing factors related to a transportation accident or incident. But in my opinion, this is not meant to prohibit another department or agency from ordering an employer to cease an ongoing contravention because the TSB might subsequently find that the act or omission that precipitated the contravention was a cause or contributing factor to the accident or incident. If this were the case, a recurrence of the very accident or incidence being investigated by the TSB could occur while the Board completes its important work. I, therefore, conclude that safety officer Shackleton was not prohibited by the CTAISB Act from investigating into the accident, or from issuing a direction to CN pursuant to the Code in respect to an occupational health and safety matter. For its part, Transport Canada issued a Notice pursuant to section 31 of the Railway Safety Act 7 days following the accident in respect of safe railway operations.

Having satisfied myself that the direction was authorized under the Code, I will now address the second issue which is whether CN was in contravention of section 124 of the Code when safety officer Shackleton issued his direction.

To decide this issue, I must return to Mr. Huart's assertion that CN cannot be in contravention of section 124 of the Code regarding safe rail operations if it is in compliance with the Railway Safety Act and pursuant regulations and rules. In his Report, safety officer Shackleton acknowledged that the OCS in a non-signaled territory is an approved method of train control and recognized as being safe by the CRORs. He also concluded from his field investigations that rail employees who handle switches are trained and knowledgeable regarding the rules that regulate switches and are cognizant of what can happen if a switch is left in the reversed position.

Notwithstanding these concessions, safety officer Shackleton held that OCS does not protect the occupational health and safety of CN employees because it does not afford train crews the extra protection that an advance warning would provide regarding the positioning of a switch. He opined that switches are subject to human error and vandalism and submitted statistics obtained from Transport Canada that show that switches have been left in the reversed position in OCS controlled territories.

So, while safety officer Shackleton feels that an extra level of protection for employees is needed relative to switches in OCS territories, he accepts that the OCS is recognized as being safe by the CRORs. Now the problem that I have with this is that the CRORs are government legislated rules established in consultation with rail companies and recognized in the rail industry as being safe. Therefore, unless the evidence is compelling to show that an extra level of protection is needed to protect the occupational health and safety of employees, I can not conclude that CN is in contravention of section 124 of the Code.

In my opinion, safety officer Shackleton did not meet the burden of proof in this case. Specifically, he did not establish that there is an intrinsic flaw with the CRORs or the OCS, not realized until the accident, that requires additional protection for employees. He did not provide evidence to dispute CN's claim that proper compliance with rule 104 of the CRORs is all that is needed to protect the occupational health and safety of its employees. Following the accident, CN clarified rule 104 of the CRORs for its employees, reminded them of the level of vigilance required, audited compliance and disciplined non compliance. Safety officer Shackleton did not establish that these, or any of the other remedial measure CN instituted following the accident, were inadequate to ensure compliance with rule 104 of the CRORs, and to protect the occupational health and safety of CN employees. Finally, I did not find the statistics provided in evidence to be conclusive with respect to CN. For these reasons, I cannot find that CN was in contravention of section 124 of the Code in respect of its employees at the time of the direction.

Under subsection 146.(3) of the Code, I am authorized to vary a direction to correct an error if the facts in the case justify the variance. That being the case, I must address the final issue which is whether, CN was in violation of any other provision of the Code in respect of the accident. As I previously indicated in the section of my decision entitled, "Applicable Legislation", paragraph 125 (c) of the Code and paragraph 11.3(a) of the On Board Trains OSH Regulations requires an employer to investigate every accident or occurrence affecting any of their employees employed and to take measures necessary to prevent recurrence, without delay. Safety officer Shackleton justified his direction to CN by stating that CN operates trains over the same tracks and, if I understood his point, the accident could have involved a CN train operating in other CN OCS territories. In the same vein, I recall that Via # 74 collided with rolling stock located adjacent to the South main track when it derailed. It occurs to me that ground employees of CN could have been injured if they were working at the site when the accident occurred. On that basis, it is my view that CN employees were "affected" by the accident and so paragraph 125 (c) of the Code and paragraph 11.3(a) of the On Board Trains OSH Regulations applies in respect of CN. However, I do not feel justified in this case to vary the direction for the following reasons.

First, a direction made pursuant to the Code is usually site specific. However, it may apply to more than one workplace if the safety officer establishes that the same hazards and risk factors exist at the other workplaces. Logic might suggest that, if a hazard exists for VIA Rail's high speed passenger trains related to CN's compliance procedures for hand operated main track switches in OCS territories in Ontario, the same hazard may exist for CN's freight trains in its other OCS territories across Canada. However, this was not demonstrated by the evidence, and safety officer Shackleton confirmed in testimony that his investigation did not extend beyond the Ontario region. In the absence of proof to the contrary, I must give weight to the fact that the Notice Transport Canada issued to CN pursuant to section 31 of the Railway Safety Act 7 days following the accident applied solely to CN's Ontario region.

Secondly, CN would be in contravention of paragraph 125 (c) of the Code and paragraph 11.3(a) of the On Board Trains OSH Regulations if it failed to immediately investigate the accident, if it failed to take measures without delay to prevent recurrence of the accident, or if the measures taken were inadequate. In the case at hand, safety officer Shackleton did not dispute the fact that CN investigated the accident or that it took remedial measures across its system. In terms of the remedial measures that CN instituted following the accident, I find it conspicuous that neither of

the two measures aimed at providing verification that hand operated main track switches are lined and locked for the main track, being the face to face verification of switch positions or the installation of CTC in OCS territories, were instituted outside of CN's Ontario region. However, safety officer Shackleton did not establish that the system wide remedial measures taken by CN in its other OCS territories were inadequate for preventing recurrence of the accident.

Thirdly, safety officer Shackleton stated that he issued his direction to CN primarily because CN controls the track and switches relied upon by Via Rail operating employees. While this approach may be appropriate for addressing operational safety issues, both sections 124 and 125 of the Code assign responsibility for protecting the occupational health and safety of employees to the employer who, in this case, is Via Rail. Since Via Rail is responsible under the Code for the occupational health and safety of its employees, an assessment of CN's response must take into account Via Rail's response to the accident.

Decision:

For the reasons indicated above, I HEREBY RESCIND the direction that safety officer Shackleton issued to CN on March 14, 2000, pursuant to subsection 145.(1) of the Code. Nothing in this decision prevents safety officer Shackleton from pursuing this matter further or from taking whatever action he deems appropriate.

Decision rendered February 2, 2001.

D. Malanka
Regional Safety Officer

APPENDIX

IN THE MATTER OF THE CANADA LABOUR Code
PART II - OCCUPATIONAL SAFETY AND HEALTH

DIRECTION TO EMPLOYER UNDER SUBSECTION 145(1)

The undersigned Safety Officer inquired into the fatalities of two VIA Rail employees in the work place operated by Canadian National Railway, being an employer, subject to the Canada Labour Code, Part II, at mile 46.7 Canadian National Railway's Chatham Subdivision, Thamesville, Ontario, April 23rd, 1999. The said work place sometimes being known as the Great Lakes District.

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

Paragraph 124 of the Canada Labour Code, Part II.

CN Rail did not provide protection to employees operating over its main track in OCS territory by ensuring that main track switches were properly lined and locked for the main track.

Therefore, you are HEREBY DIRECTED, pursuant to paragraph 145(1) of the Canada Labour Code, Part II, to terminate the contravention no later than April 15th, 2000.

Issued at Toronto, this 14th day of March, 2000.

Rick Shackleton
Safety Officer #3308

Canadian National Railway
1 Administration Road
P.O. Box 1000
Concord, Ontario
L4K 1B9

Attention Mr. E.H. Laks

SUMMARY OF REGIONAL SAFETY OFFICER DECISION

Applicant: Canadian National Railway

Respondent: Mr. R. Scully

KEY WORDS

Rail accident; fatality; injury; operating crew; high speed train; passenger train; main track switch; switch targets; Occupancy Controlled System; dark territory; Centralized Traffic Control; Chatham Subdivision; Grimsby Subdivision.

PROVISIONS

Code: 122.1, 123.1(a), 124; 125.(c), 145.(1), 146.(3)

On Board Trains
Occupational Safety
and Health Regulations: 11.3(a)

Canadian Transportation
Accident Investigation
and Safety Board Act: 14.(4)(a)

SUMMARY

At approximately noon, Via # 74 crossed a crossover switch lined in the reversed position near Thamesville, Ontario. The locomotive derailed, rolled over and collided with 3 hopper cars located on an adjacent siding. The impact of the collision fatally injured the two occupant locomotive engineers and injured other rail operating employees. Safety officer Rick Shackleton investigated the accident and on March 14, 2000, issued a direction to Canadian National Railway (CN) pursuant to subsection 145.(1) of the Code. The direction ordered CN to protect its employees operating over its main track in Occupancy Control System territories by ensuring that main track switches are properly lined and locked.

Following his review, the Regional Safety Officer rescinded the direction because there was insufficient proof that CN had contravened section 124 of the Code or any other provision therein. The Regional Safety Officer also noted that, under the Code, Via Rail is responsible for protecting the occupational health and safety of its employees and not CN.