TRANSPORTATION APPEAL TRIBUNAL OF CANADA

Citation: *Canadian National Railway v. Canada (Minister of Transport)*, 2020 TATCE 12 (Appeal)

TATC File No.: W-0026-41

Sector: Rail

BETWEEN:

Canadian National Railway, Appellant

- and -

Canada (Minister of Transport), Respondent

Heard in:	Edmonton, Alberta, on September 25, 2019
Before:	George (Ron) Ashley, Member (chairing) Gary Drouin, Member Teddy Kwan, Member
Rendered:	April 20, 2020

APPEAL DECISION AND REASONS

Held: Pursuant to subsection 40.19(3) of the *Railway Safety Act*, the appeal is dismissed.

The total amount of $55,500.24 is payable to the Receiver General for Canada and must be received by the Transportation Appeal Tribunal of Canada within 35 days of service of this decision.

I. BACKGROUND

[1] By Notice of Violation (Notice) dated December 20, 2017, pursuant to subsection 2(1) of the *Railway Safety Administrative Monetary Penalties Regulations* and procedures in sections 40.14 to 40.22 of the *Railway Safety Act (RSA)*, Transport Canada assessed a monetary penalty of $55,500.24 against Canadian National Railway (CN) for an alleged contravention of subsection 93(2) of the *Grade Crossings Regulations*.

[2] Schedule A of the Notice stated:

> Between December 20, 2016 and January 9, 2017, at mile 112.8 of CN's Lac La Biche Subdivision at or near Edmonton, Alberta, CN did not ensure that the warning system was maintained in accordance with article 17.1 of the Grade Crossing Standards that requires that inspection and testing of warning systems be done in accordance with article 3.3.1 and 3.1.15 of AREMA Communications and Signals Manual thereby contravening subsection 93(2) of the Grade Crossing Regulations.

[3] The review hearing took place on May 15 and 16, 2018 in Edmonton, Alberta. In a determination dated February 5, 2019, the review member upheld the imposition of the assessed monetary penalty.

[4] The legislative provisions and rules applicable to this proceeding are outlined in the paragraphs that follow.

[5] Subsection 93(2) of the *Grade Crossings Regulations* states:

> **93 (2)** The warning system must conform to the design plan and must be maintained in accordance with article 17.1 of the Grade Crossings Standards.

[6] Article 17.1 of the *Grade Crossings Standards* provides:

> **17.1** Inspection and testing of warning systems must be done in accordance with article 3.3.1 and 3.1.15 of *AREMA Communications and Signals Manual* (cited in Part A).

[7] Article 3.3.1 of the AREMA (American Railway Engineering and Maintenance-of-Way Association) *Communications and Signals Manual*, Part C – General, states that tests shall be made periodically to determine that the warning system functions as intended.

[8] Item 101 of Part 5, Schedule I of the *Railway Safety Administrative Monetary Penalties Regulations* names subsection 93(2) of the *Grade Crossings Regulations* as a designated provision for which the Administrative Monetary Penalty (AMP) regime of sections 40.13 to 40.22 of the *RSA* applies.

Grounds for Appeal

[9] At the appeal hearing, Counsel for CN argued: i) the Minister did not discharge its burden in proving the contravention and, if it did, then ii) CN is not liable for any contravention, as this is a clear case where CN can prove a due diligence defence.

II. ANALYSIS

A. Facts

[10] The facts are set out in the review determination and they are not disputed.

[11] On January 17, 2017, a Transport Canada railway safety inspector became aware that the Advance Warning System (AWS) governing the CN railway crossing located at mile 112.8 of CN's Lac La Biche Subdivision had not been inspected or tested in compliance with the *Grade Crossings Regulations*. This crossing is located at or near the city of Edmonton, Alberta, where a public roadway travels over and across a single-track CN railway line. The signalization at this crossing is limited to the flashing lights and crossbuck standard; there are no crossing gates.

[12] The information obtained from CN by the railway safety inspector suggested that weekly inspections and tests done on that particular AWS, on December 20 and 27, 2016 and on January 3, 2017, had not ensured that the "power off light" (POL) on the signalization equipment was "steady lit" or activated.

[13] The POL is a lamp located on the exterior housing of the signal bungalow adjacent to the crossing which indicates whether or not the AWS is operating under normal conditions. The POL lamp, basically a button light, should be "on" or lit/activated and as such, demonstrate to CN signals and communication personnel or maintenance-of-way personnel that the signal protection at the crossing is working on DC or battery current.

[14] The activated light shows that backup alternative (AC) power is functioning. When the POL is on or activated, the DC power is activated and the AC power is also available, meaning it can kick-in when the DC power is drained. The AC power is the backup power and ensures that the signal protection works at all times. If the POL is off or not activated, then the AC backup is not available; so once the DC power is drained, the AWS protection will not function. How long the DC power will function depends on a number of factors, including how often the protection is triggered by passing trains.

[15] The evidence showed that the AC power feeding the batteries of the AWS at the road/rail crossing at mile 112.8 of the Lac La Biche Subdivision had been disconnected following a December 14, 2016 monthly inspection by a CN employee.

[16] CN officials admitted that the CN employee who inspected the safety equipment on that date was negligent in failing to ensure the AC power was activated, as was another CN employee who subsequently inspected it on December 20, 2016 and January 3, 2017. CN officials also admitted that an employee for a CN subcontractor, Remcan, was negligent when he conducted an inspection on December 27, 2016.

[17] The inspectors at each of the four inspections recorded that the POL was on when it was not. This was noted in writing in the Blue Book maintained at the crossing for the purpose.

[18] It was only on January 9, 2017, that a different CN employee, acting in the course of the mandated crossing inspections, observed that there was no power at all at the crossing. At that

time, a "trouble ticket" was developed by the responsible CN personnel and remedial measures were undertaken, restoring both DC and AC power.

[19] The Remcan employee resigned, according to CN officials, and the CN employees who inspected on December 14 and 20, and on January 3, were disciplined.

[20] No accidents were reported at this location during the relevant time frame and there were no official reports that the crossing protection was not working. The first awareness that the protection was not working was at the time of the monthly inspection that took place on January 9, 2017.

B. Standard of Review

[21] CN argued that both of its appeal grounds should be reviewed by this panel further to a correctness standard. Counsel for the Minister agreed.

Panel Finding

[22] The first appeal ground was whether the Minister has, on a balance of probabilities, established the existence of the contravention. It will be reviewed on the correctness standard, as this is a question of law. The second ground, whether or not CN has proven to have exercised due diligence, is a question of mixed fact and law and it too shall be reviewed on the correctness standard. Both of these findings are consistent with the rationale set out in *Canada (Attorney General) v. Friesen*, 2017 FC 567, paragraph 57, and support an appeal review standard where no deference is to be given to the review determination.

(1) Ground one – proof of the contravention

[23] The appellant admits there were five scheduled inspections at the subject crossing: on December 14, 2016; December 20, 2016; December 27, 2016; January 3, 2017; and on January 9, 2017. At four of these inspections, there was a failure to observe that the AC backup power had not been activated. CN witnesses stated that the personnel performing these inspections failed to notice that the POL was not "steady lit". At each of the four inspections, personnel falsely recorded the POL as being on. When asked about this at the review hearing, personnel offered no explanation or, more properly, "couldn't understand", apart from their negligence or error, why they improperly recorded the POL as being on.

[24] Throughout the nearly four-week period, CN supervisory personnel were unaware of the errors. They only became aware of the problem on January 9, 2017 when the "trouble ticket" was issued by new CN engineering group personnel, this as part of their January (monthly) inspection.

[25] CN argued that all the inspections were nevertheless completed as required and that it was employee (and in the case of the subcontractor, the Remcan employee) negligence or gross negligence that intervened. CN submitted that their inspectors "botched the (inspection) job" and were "complacent".

[26] CN argued that the four inspections were all compliant with the regulations; that is, the inspections were periodic and at each one, personnel checked to ensure the crossing protection was functioning as designed or intended. CN argued that the Minister should have, and failed, to prove that at each of the four inspections the signalization was not working as intended.

[27] Counsel for the Minister argued that whether or not the signalization was working is irrelevant. Counsel submitted that the inspections by the CN employees and contractor did not comply with the regulatory requirements and, as such, were not done properly. The error or non-compliance, according to Counsel, was that the inspections failed to detect if the POL was steady lit, as intended; this being a requirement under subsection 93(2) of the *Grade Crossings Regulations*.

Panel Finding

[28] This appeal is about what constitutes a rail crossing warning system that operates as "intended", pursuant to Article 3.3.1 of AREMA. This means that it is one that operates appropriately and adequately in order to protect the public and CN employees when trains transit an active roadway. It presents a high standard given that health and safety are involved. The protection system must be one that works on an ongoing basis to warn the passing public to oncoming trains.

[29] The four inspections at issue were periodic and duly recorded in the CN Blue Book as well as in the CN internal data-recording system. All failed to detect that the POL was not activated, falsely recording that it had been.

[30] The need for ongoing AC backup to a crossing protection system is integral to the adequacy of that system. The activation of the POL is part of that backup system and is not a gratuitous requirement. The POL is the prime, if not only, indicator at the crossing to show that there is the necessary AC back up. An adequate safe warning system cannot be one that is ad hoc in terms of functioning, or not, depending on if or when the DC power fails. The AC backup must always be available. Without it the safety equipment and the protection that it is designed to offer will not function if the batteries fail. There can be no exceptions or risk of exception to this when safety is involved.

[31] It is unknown how long the DC power for the warning equipment had been exhausted prior to the monthly inspection that took place on January 9, 2017. There is no record of complaint or employee report detailing, for example, when or if the signalization was not working. What is known, however, is that there were four sequential inspections, roughly one week apart, which failed to detect that the POL was not steady lit. Whether or not the protection actually failed at some period is not the point.

[32] The POL provides the assurance that there is necessary power backup. When inspections record the AC backup as activated when it is not, then those inspections are defective because they introduce a randomness to the available protection. As such, they are not inspections that have ensured the warning system functions consistently, or "as intended" within the meaning of Article 3.3.1 of AREMA. For these reasons, the review determination finding that the contravention took place is correct. CN's first appeal ground is dismissed.

(2) Ground two – CN's due diligence

[33] CN's second appeal ground is that the review determination failed to adequately assess CN's due diligence evidence, which included proof of CN training, refreshers, audits and monitoring.

[34] CN also argued that the two CN employees and one subcontractor who conducted the inspections went "off script" when they recorded the POL as steady lit. Citing jurisprudence on due diligence, Counsel basically argued that there is nothing CN could reasonably have done to avoid this kind of "botching" by these inspectors.

[35] Counsel for the Minister argued that the review determination was correct when it ruled that not all steps had been taken to prevent the specific violation from occurring.

[36] Both sides offered case law supporting their respective positions touching upon questions of employee negligence, foreseeability, as well as regulatory compliance and liability.

Panel Finding

[37] A successful due diligence defence is one that establishes on a balance of probabilities that all reasonable steps were taken to avoid committing the specific offence or contravention at issue.

[38] The leading authority for this is *R. v. Sault Ste. Marie* [1978] 2 S.C.R. 1299. This decision established that the defence of due diligence is available to a person, or a corporation that has been charged in respect of an act committed by an employee, if they exercised all reasonable care by establishing a proper system to prevent the commission of the violation and if they took all reasonable steps to ensure the effective operation of the system.

[39] In the present appeal, the question is whether or not CN (i) took all reasonable care to establish a system to prevent the defective signal inspections at this crossing, and (ii) took all reasonable steps to ensure that the crossing safety inspection system that had been set up operated effectively.

(3) The safety system CN had in place

[40] CN's argument is that the four inspections were "botched" and "negligent" because the inspectors, acting within the systems CN had set up, simply did not follow the rules and did not turn their minds to the POL. This kind of conduct, according to CN, is not foreseeable and no reasonable system could have prevented it. CN argued that the safety system it had put in place was reasonable and that the employees or subcontractor are culpable – not CN.

[41] Counsel for the Minister argued that the system was not a reasonable one in the circumstances and that the railway company is liable.

Panel Finding

[42] The evidence shows that the system CN set up included periodic front-line inspections at crossings. There were monthly inspections by the engineering group and weekly ones performed

by the CN signals and communications (S&C) group. Each inspection was to include a testing for lights and bells plus a walk-around, all to see that the system was functioning as designed. There was training, testing, a video refresher, engineering track standard retraining every three years, and some internal monitoring by the company.

[43] Training for inspectors was a one-year process that included a combination of classroom and in-the-field experience, and this was followed-up with videos and "Rules of the Week" which employees were expected to review and follow. It is not clear whether the same applies to subcontractors, although CN admitted they are "just another employee" or "one of us" and have access to CN materials and training.

[44] CN stated that it does 120,000 inspections per year by S&C personnel with a "compliance rate of 99.98 per cent", meaning there are about 30 "outliers". It is not apparent that those 30 represent cases where the inspection fails to detect that the POL is not steady lit. Rather, they are cases where a crossing was not inspected within a "seven-day tolerance". The internal reporting is assessed by CN supervisors on an ongoing basis, and the outliers are identified and reviewed.

[45] There is also occasional checking where CN supervisors are able to cross-reference an inspection report with GPS data to ensure that employees actually attended at a particular crossing location. It is not clear how often this kind of checking takes place although the appeal panel accepts that it has been undertaken by CN.

[46] The system CN set up also carried disciplinary measures to encourage compliance.

[47] In light of all of the above, the review determination found that the system CN had put in place for crossing inspections was "solid", meaning it was reasonably designed to manage crossing safety. This is a correct finding.

(4) Was the safety system working effectively?

[48] CN argued that further to its crossing inspection framework, there was no resulting accident at this crossing during the time period. Similarly, there was neither complaint nor other evidence that the protection was not actually working at all times.

[49] Counsel for CN argued that while the inspections at issue were appalling and the impact of such employee mistakes can be "catastrophic", CN cannot be faulted as the mistakes were not reasonably foreseeable. In terms of discipline, the evidence shows that the contractor resigned, and the two CN employees were disciplined with demerit points and job re-assignments. CN witnesses also stated at the review hearing that eight individuals had been fired in the last five years for negligence.

[50] In these circumstances, CN states that the system it had in place was an effective one, thereby satisfying the second aspect of the due diligence defence.

[51] Counsel for the Minister argued that regardless of CN's general conduct and its actions subsequent to the violations, CN failed to demonstrate that it had taken all reasonable steps to ensure the effectiveness of the crossing safety program it had in place for track inspectors.

Panel Finding

[52] The training, audit, monitoring and discipline function put in place by CN was reasonably designed to manage crossing safety. But, once in place, there were insufficient precautions to ensure ongoing compliance.

[53] The defective crossing inspections at this crossing were reasonably foreseeable by CN supervisors as early as November 2015. At that time a CN supervisor, alluding to recent crossing accident experience, specifically warned personnel about defective inspection practices. His warning, tantamount to an admonition, gave no indication as to what may be the reasons behind defective inspections.

[54] Precautions for safety system compliance must, among other matters, be commensurate with the consequences of failure. The greater the danger or damage that can arise due to a mistake, the greater the responsibility to reasonably manage the risk. And, the greater the propensity or likelihood for a mistake to arise, the greater the obligation of the company to manage it. In the present case, an assessment of both aspects points to the need for highly effective safety management.

[55] The appeal panel finds that CN's precautions fell short of what is reasonable. In spite of that awareness, including the strong supervisory warning a year earlier, CN's formal harm prevention and monitoring system failed to deal with such complacency. It fell short of what was reasonably required in the circumstances, given potential impacts and evidence of ongoing employee fault.

[56] CN cannot be reasonably expected to anticipate every instance of employee negligence or mistake. But the present case is different; it is one where the propensity for that negligence and rule-breaking could be, and was, reasonably anticipated as far as safety inspections at crossings go. Notably, the negligence was systemic where, at this particular crossing, non-compliance went undetected over a one-month period.

[57] The "Walk of Life" as well as an accident-specific video was offered as evidence of CN's pro-activity (what CN termed a "refresher"). The latter was stated to be the direct result of the supervisor's November 2015 warning. According to CN, nothing more direct was necessary since the safety inspections involved here were "one of the simplest tasks to perform". Implicit in this is the notion that CN management should be permitted to assume that employees will follow all the rules.

[58] The measures that CN put in place included continued reading of the CN Rule of the Week as well as employee viewing of videos. There was no evidence of anything more specific in terms of training or emphasis on proper crossing inspections. While one of the CN witnesses stated that retraining on signal inspection was required every three years, there was no evidence of requalification training for any of the employees or contractors involved here. The evidence shows that the last training for one employee was in October 2011, and in 1998 for the other. There was no evidence of the training or retraining undertaken by the Remcan employee.

[59] There is no evidence showing that supervisor oversight following the November 2015 warning memo changed significantly. That which did exist during that period failed to deal with

non-compliance starting on December 14, 2016. It continued over a nearly four-week period involving three new inspections performed by CN employees and a subcontractor. A reasonably effective inspection system would have ramped-up or formalized specific refreshers or retraining following the November 2015 warning. And then, whether through renewed training or monitoring, someone could have picked up and corrected the non-compliance; this, at least, following the December 14, 2016 inspection.

[60] Any correction of the faults arose only after the non-compliance was discovered on January 9, 2017, prompting a CN supervisor to shortly thereafter bemoan in an e-mail, "… do these ATS/TS/Contractors even know what a PO light looks like?".

[61] Overall, the appeal panel finds that an established crossing safety inspection system is not effective when, as here, it permits specific errors to go undetected so often and for so long. This is especially true when the propensity for those errors is known in advance and where the risks of non-compliance are potentially "catastrophic".

[62] Crossing safety is considered a "cardinal rule", the breaking of which could be considered similar to train crews going through a red signal on railway tracks. Safety instructions are in place to ensure train crews comply with them, yet CN did not demonstrate the same vigilance for this particular crossing. Considering that a nearby school provides school bus services to young students, CN inspections of the crossing system should have been raised to a higher standard.

[63] The review determination found, based on the evidence, that the signal protection inspection system at CN was not reasonably effective in preventing the faulty inspections that gave rise to the Notice of Violation being issued against CN for a contravention of subsection 93(2) of the *Grade Crossings Regulations*. This is a correct finding.

III. DECISION

[64] Pursuant to subsection 40.19(3) of the *Railway Safety Act*, the appeal is dismissed.

[65] The total amount of $55,500.24 is payable to the Receiver General for Canada and must be received by the Transportation Appeal Tribunal of Canada within 35 days of service of this decision.

April 20, 2020

(Original signed)

Reasons for the appeal decision: George (Ron) Ashley, Member (chairing)

Concurred by: Gary Drouin, Member

Teddy Kwan, Member

Appearances

For the Minister:	Eric Villemure
For the Appellant:	Yannick Landry