



## REASSESSMENT OF THE RESPONSE FROM TRANSPORT CANADA TO RAIL SAFETY RECOMMENDATION R03-03

### IMPLEMENTATION NEW GRADE CROSSING PROCEDURES

#### Background

On 28 September 2000, at approximately 0745 eastern daylight time, VIA Rail Canada Inc. passenger train No. 85, proceeding westward on the Goderich-Exeter Railway Company Guelph Subdivision, struck a motor vehicle at the public crossing at Mile 33.54, near Limehouse, Ontario. All three vehicle occupants were fatally injured. At the time, contractors were at the crossing preparing to lay a conduit for fibre-optic cable under the roadway near the tracks.

The Board recognizes that the Department of Transport has done much work over the past 10 to 13 years to develop new crossing regulations. However, the Board is concerned about the time taken to replace the existing regulations, which are minimal and essentially obsolete. The delay in promulgating new regulations is not advancing crossing safety in Canada.

As a result of the TSB's investigation ( TSB Report No. R99T0147) into a previous crossing accident and derailment of a Canadian National (CN) freight train and a VIA Rail passenger train at Mile 292.59 of CN's Kingston Subdivision near Bowmanville, Ontario on November 23, 1999, the Board issued the following recommendation in 2001.

The Department of Transport expedite the promulgation of new grade crossing regulations (R01-05, issued 11 September 2001).

The Ministers response to R01-05 was as follows:

TC agrees with the need for the promulgation of the new grade crossing regulations. TC is currently finalizing the new Grade Crossing Regulations and it is expected that the regulations will be published in Part I of the Canada Gazette in the spring of 2002.

The proposed Grade Crossing Regulations are intended to set clear safety standards for all grade crossings. The regulations will also clearly define the responsibilities of railway companies, public road authorities and private road owners.

Transport Canada's forthcoming new grade crossing regulations were not published as scheduled in 2002. The new regulations were intended to address the issues of safety standards for crossings and to define clearly the responsibilities of railway companies, public road



authorities and private road owners. These will include temporary protection requirements that are to be followed when construction work is underway at crossings or when visibility of crossing signals is impeded.

TSB Report No R99T0147 included the following comments on the adequacy of procedures to ensure the safety of the travelling public where there is construction underway at railway crossings at grade.

The particularly dangerous and unforgiving nature of collisions between motor vehicles and trains has long been recognized. To lessen this risk, reliance has traditionally been placed on the protection provided by automatic warning devices. However, when there is construction activity at a crossing, drivers may be confused by contradictory stimuli and may not view the automatic warning devices as a clear instruction to stop. Neither the Transportation Association of Canada's Manual of Uniform Traffic Control Devices, the Railway Association of Canada (RAC) circular, Recommended Practices for Manual Protection at Railway/Road Grade Crossings, nor Transport Canada's (TC) current regulations address this risk.

It is anticipated that TC's proposed Grade Crossing Safety Regulations and associated manual will require the responsible authority to ensure that adequate traffic controls are in place so that the work does not adversely affect safety at crossings. However, the Board is concerned that these regulations are not yet in force and, to this end, it very recently made recommendation R01-05 regarding the need to expedite the promulgation of these regulations. Moreover, the Board is concerned that, once the regulations come into force, a variety of procedures will likely be established on a site-by-site basis and a piecemeal approach may not ensure that a secondary defence to automatic warning devices is provided at all crossings under construction. The absence of an effective secondary defence has the potential to place Canadian motorists at risk.

The introduction of secondary defences is not a complicated matter but it will require a concerted effort on the part of government and industry. The Board is of the opinion that this effort could come from Direction 2006. This program, sponsored by TC and the RAC, is described as "... a partnership between all levels of government, railway companies, public safety organizations, police, unions and community groups..." The objective of this initiative is to reduce grade crossing collisions and trespassing incidents by 50 per cent by the year 2006."

As such, Direction 2006 is in an excellent position to work to reduce collisions at crossings at which construction activity is occurring.

Because of the potential for government/industry initiatives through Direction 2006 and in anticipation of Safety Recommendation R01-05, the Board felt that an additional recommendation, at this time, was not necessary. However, the Board believes that there is an opportunity for TC and the RAC, through Direction 2006, to develop a uniform set of standard procedures which will ensure the safety of motorists approaching all grade crossings undergoing construction activity. These standards could ensure that motor vehicles are given advance warning of oncoming trains and a clear and unequivocal instruction to stop. Once developed, Direction 2006 would be able to distribute these to all railways in Canada and encourage their implementation.

The very slow pace of regulatory process towards addressing this issue means that motorists continue to be placed at risk. While there is already a Board recommendation (R01-05) on expediting the issuance of the Grade Crossing Regulations, it is clear that delays continue. Consequently, the Board recommends that:

The Department of Transport implement new grade crossing procedures without delay irrespective of the status of the proposed regulations.

R03-03

### **Board Recommendation R03-03 (June 2003)**

TC is working on a priority basis on developing Grade Crossing Regulations, which will address the safety issues raised by the TSB. The process of developing the proposed Grade Crossing Regulations is highly technical and complex. The Department is committed to producing regulations that are as comprehensive as possible to improve the safety of motorists approaching grade crossings undergoing construction, maintenance or testing.

Due to the technical and financial complexities of the proposed regulations, consultations have been held widely across Canada in order that all provinces and municipal associations were consulted regarding the content and intent of the proposed regulations. As part of the Regulatory Impact Analysis Statement, TC is obligated to estimate the cost of implementing the regulatory proposal. A Grade Crossing Regulations Working Group (GCRWG) is currently examining the costs associated with implementing the proposed regulations and is striving to complete its work on the proposed regulations, technical standards and cost benefit analysis.

It is TC's goal to have the GCRWG consultative process completed by the end of this summer, (2003) followed by consideration of the regulatory proposal by the department. Publication in Canada Gazette Part I is expected to follow later in the year, followed by Canada Gazette Part II in 6-8 months. Therefore the provisions of the regulations would not come into effect until the end of Summer 2004.

In addition, the RAC is developing a Recommended Practices for Manual Flagging at Railway/Road Grade Crossing to complement the proposed Grade Crossing Regulations. These procedures are proceeding independently of the regulations.

The Department, with the railway industry, will expedite the implementation of these procedures aimed at improving the safety of motorists approaching grade crossings undergoing construction activity. TC will meet with RAC in June 2003 to formally outline its expectations and objectives regarding their procedures.

The TSB has been provided with a Draft copy of the new recommended practice and the scope of the Draft RAC Recommended Practice is stated as follows:

1. SCOPE
  - 1.1 These practices are intended to ensure that there are acceptable procedures and instructions in place to permit railway employees to safely perform manual protection at railway/road grade crossings when:

- a. the uncontrolled movement of traffic could be hazardous to workers;
  - b. work is being performed at or near a railway/road grade crossings;
  - c. automatic warning devices are not working as intended; or
  - d. signal lights, gates, and other protective devices are broken or damaged.
- 1.2 Except as otherwise noted, this circular is intended to apply to manual protection performed by engineering employees and contractors working on behalf of the railways.

Train and Engine Crews required to manually protection crossings will continue to be governed by the requirements of the Canadian Railway Operating Rules (CROR) and individual railway operating instructions.

### **Response to R03-03 (February 2004)**

In his response, the Minister informed that Transport Canada (TC) has taken action to advance the new crossing regulations on a priority basis. However the progress has continued to be slowed by procedural requirements. The RAC development of a proposed circular entitled "Recommended Practices for Manual Protection at Construction Sites" is progressing, but has not yet been finalized. The RAC has progressed the Recommended Practices for Manual Protection at Railway/Road Grade Crossings independently of the TC Regulation, and provided a draft copy to the TSB. The Board recognizes the efforts and actions by TC and the RAC. However, since the proposed procedures for the manual protection of railway/road grade crossings remains in draft form at this time, and there is a continued delay in production of the procedures, the response to Recommendation R03-03 is assessed as **Unsatisfactory**.

### **Additional Information (October 2004)**

The RAC has developed and finalized the Recommended Practices for Manual Protection at Railway/Road Grade Crossings independently of the TC Regulation, and provided a final copy to the TSB.

### **Board Reassessment of Response to R03-03 (December 2006)**

The Board has received a copy of the Recommended Practices for Manual Protection at Railway/Road Grade Crossings from the RAC and therefore the response to Recommendation R03-03 is assessed as **Fully Satisfactory**.

This deficiency file is assigned **Closed** status.