

Macedon Ranges Fires

25th January 2003

State Coroners Office, Southbank, Victoria

Macedon Ranges Fires

Coroner's Case Number 3901/03 (Fire)

A series of fires (known as the 'Macedon Ranges Fires') occurred along the Melbourne/Bendigo railway line on 25th January 2003 from an unidentified cause but possibly linked to a passing locomotive.

If the fires were caused by the passing locomotive, in each instance one of the possibilities is that the cause may have been related to carbon material propelled from the exhaust system of the locomotive engine above the slipstream of the moving train, and carried by the prevailing wind to each of the fire sites. Another of the possibilities, although unlikely, is that the fire cause is related to human intervention. However, as indicated in the conclusion to this finding, it is not possible to make a factual and theoretical finding on the source of ignition for each of the five fires to the required evidentiary standard.¹

Summary of the circumstances surrounding the fires and the key issues

On 25th January 2003 a scheduled V/Line passenger departed Spencer Street railway station for Bendigo at approximately 8.40 am. The train comprised of an N series locomotive Number N459 (City of Echuca) which was drawing 4 passenger carriages. Subsequently, in the path followed by the train, there were five fires occurring along the Melbourne/Bendigo railway line. Shortly after the train departed the Woodend station it was stopped by CFA personnel who indicated to the driver that the train was starting fires. A brief check was made of the train, by the train crew, and it continued with a further two fires occurring near the line after the train passed.

The origin (as distinct from cause) of the five fires is summarised in the submission of the Country Fire Authority and Department of Sustainability and Environment as being:

"First Fire-Eastern Sector Fire

In the case of the first fire known as the Eastern Sector of the Pearce Road fire, the point of origin was identified by Mr O'Sullivan as grid reference 55H 02900601, UTM 5850590, being a point located in native vegetation south of the railway vehicle management road and approximately 20 metres from the outer Melbourne to Bendigo railway line.

Second Fire-Pearce Road Fire

In the case of the second fire, known as the Pearce Road fire, the point of origin was identified by Mr O'Sullivan as grid reference 55H 0289561, UTM 5850837, being a point located on the southern side of a steep railway cutting approximately 7 metres east of the Pearce Road underpass bridge and approximately 3 metres south and about 3 metres vertically up the embankment of the outer Melbourne to Bendigo railway line.

¹ The test is known as the 'Briginshaw Standard' – see discussion on this test under sub-heading to this finding – 'Jurisdictional and legal issues in Coroner's fire investigation'.

Third Fire-Ferrier Road Fire

In the case of the third fire known as the Ferrier Road fire, the point of origin was identified by Mr O'Sullivan as grid reference 55H 0286111, UTM 5851675, being a point in native vegetation south of the railway vehicle management road and about 8 metres from the outer track, south of the Melbourne to Bendigo railway line.

Fourth Fire-Woodend Control Fire

In the case of the fourth fire known as the Woodend Control fire, the point of origin was identified by Mr O'Sullivan as grid reference 55H 0279384, UTM 5863279, being a point in grassland to the south of the railway easement road, approximately 10 metres south of the outer Melbourne to Bendigo railway line.

Fifth Fire-Crows Road Fire

In the case of the fifth fire known as the Crows Road fire, the point of origin was identified by Mr O'Sullivan as grid reference 55H 0277896, UTM 5866622, being a point approximately 3 metres south from the outer edge of the Melbourne to Bendigo railway line.

There are a number of possible fire cause (or ignition) scenarios which may be summarised as follows:

- (a) human involvement on the train (accidental or deliberate);
- (b) human involvement outside the train using the passage of the train as cover (or coincidentally running with the train);
- (c) sparks from the train brakes;
- (d) source of ignition related to exhaust emissions;
- (e) other sources of ignition like a natural event (i.e.: lightning or sun related ignition).

Jurisdictional and legal issues in the Coroner's fire investigation

The Coroner has a jurisdiction to investigate fires, distinct from the jurisdiction to investigate reportable death.

The Coroner is required by Section 36(1) (a) of the *Coroner's Act* 1985 to find if possible, the "cause and origin of the fire", and by s.36 (1) (c) "the identity of any person who contributed to the cause of the fire".

This inquest is being conducted pursuant to Sections 34(3) and 35(1) (a) of the *Coroners Act* 1985. Section 36 of the Act provides as follows:

36. Findings and comments of coroner

- (1) A coroner investigating a fire must find if possible-
 - (a) the cause and origin of the fire; and
 - (b) the circumstances in which the fire occurred; and
 - (c) the identity of any person who contributed to the cause of the fire.
- (2) A coroner may comment on any matter connected with the fire including public health or safety or the administration of justice.

- (3) *A coroner must not include in a finding or comment any statement that a person is or may be guilty of an offence.*

In relation to the issue of 'contribution' to the fire or fires it has been held by the Court of Appeal, in the context of the now-repealed Section 19(1) (e) of the Act, that the test of contribution (in relation to death) is "*solely whether a person's conduct caused the death*": *Keown v Kahn* [1999] 1 VR 69 at 76. In this regard, Counsel for V/Line submitted that:

"There is no reason to take a different approach to the question of contribution in s. 36(1) (c) of the Act."

And it therefore follows that a finding that:

"the cause of the Macedon fires was the emission of substances from the exhaust of locomotive N459 on 25 January 2003 will necessarily involve a finding that the operator of the locomotive, V/Line Passenger Pty Ltd, "contributed to the cause of the fire" for the purposes of s. 36(1)(c) of the Act."

Counsel for V/Line also submitted that:

"The authorities recognize that a finding of contribution under the Act is a very serious matter: Anderson v Blashki [1993] 2 VR 89 at 95-6; Secretary to the Department of Health and Community Services [1995] 2 VR 69 at 73-4; Chief Commnr of Police v Hallenstein [1996] 2 VR 1 at 19. This is so whether the person concerned is an individual or a corporate body: Chief Commnr of Police v Hallenstein [1996] 2 VR 1 at 21 (Victoria Police Force).²

Due to the very serious nature of a finding of contribution under the Act, the standard of proof to be attained in support of a finding of contribution is the 'Briginshaw standard': Chief Commnr of Police v Hallenstein [1996] 2 VR 1 at 21. This means that no finding is to be made based on inexact proofs or indefinite testimony. There must exist a "comfortable satisfaction" in respect of the evidence.³ As Hedigan J observed in Hallenstein (at 19):

The identification of the appropriate standards of proof and satisfaction is important, a matter that at all times must be borne in mind by any coroner who has to consider findings of contribution which must not lightly be made and only be made when there has been established the necessary degree of satisfaction of mind.

The importance of this approach is clearly demonstrated by the facts of this case. A finding by the Coroner that a properly-maintained turbo-charged diesel engine started five fires would impact not only on V/Line, but many operators and maintainers of such engines throughout Australia. It is a finding that must not be made unless there exists that necessary degree of satisfaction of mind that such a finding is supported by cogent, reliable evidence."

² See also Linton Fires Findings, at pp 16-17.

³ The expression appears in the judgment of Southwell J in *Secretary to the Department of Health and Community Services* [1995] 2 VR 69 at 74