

FORM 39

Rule 61(1)

FINDING INTO FIRE WITH INQUEST

Section 68 of the Coroners Act 2008

Court reference: 4668/05

Inquest into the fire at Hamilton Hwy, Wingeel Plains, Victoria

Delivered On: 4th April 2011
Delivered At: Coroner's Court of Victoria
Hearing Dates: 15th to 17th December, 2008
2nd, 3rd, 6th to 8th April, 2009 at
Melbourne Magistrates Court

Findings of: PETER WHITE

Representation: Mr J. Carmody (G. Robinson and D. Bath)
Mr T. Woodward (Country Fire Authority)
Mr A. Trichardt (ARTC)
Ms M. Hartley (VicTrack and Department of Transport)
Mr N. Murdoch (Downer EDI Rail Pty Ltd and
Downer EDI Works Pty Ltd)
Mr T. Grace (Genesee and Wyoming (Aust) Pty Ltd)

Police Coronial Support Unit:

L/S/C Remo Antolini

FORM 39

Rule 61(1)

FINDING INTO FIRE WITH INQUEST

Section 68 of the Coroners Act 2008

Court reference: 4668/05

In the Coroners Court of Victoria at Melbourne
I, PETER WHITE, Coroner

having investigated the fire of:

Details of fire:

Location of fire:	Hamilton Highway, Wingeel Plains, Victoria
Date of Fire:	2nd February, 2001

AND having held an inquest in relation to this fire on 15th to 17th December, 2008, 2nd, 3rd, 6th to 8th April, 2009
at Melbourne Magistrates Court find that the cause and origin of the fire was:

as set out below:

1. The evidence heard at Melbourne Magistrates Court between the 15th to 17th December 2008, 2nd, 3rd, 6th to 8th April 2009, establishes that the Wingeel Plains fire occurred at or about the time that a freight train 5AMP3P, passed through the area. It was not in dispute that these fires caused widespread damage to pasture and stock in the area.

Interested Parties

2. There were a number of interested parties represented during the inquest.

3. These were:

- 1) the Victorian Rail Track Corporation, which was the owner of the rail network, (VicTrack), which it leased to the Director of Public Transport.
- 2) the Australian Rail Track Corporation (ARTC) which took control of the Victorian Country Rail network, including the track in the Wingeel area in July 1999, by means of a sublease entered into by the Director of Public Transport in favour of ARTC.
- 3) ARTC then entered into contracts with rail operators for access to the track. One such contract was entered into between ARTC and Patrick Portlink Pty Ltd (Patrick), whereby Patrick was allowed to use tracks which included a track through Wingeel, for the

operation of trains. The passage of the Patrick owned 5AMP3P on the 2nd of February 2001, was permitted by these contractual arrangements.

- 4) In October 1999 ARTC entered into an agreement with ABB Engineering Construction Pty Ltd (ABB) in respect of maintenance of the track. By further arrangement, Evans Deakin Pty Ltd (EDI) took over the duties of ABB. EDI arranged for its subsidiary company EDI Works Pty Ltd (DEW) to carry out the maintenance work. Mr Kyle Mortimer gave evidence on behalf of DEW concerning the maintenance of the track and the surrounding grass etc.
- 5) The train 5AMP3P consisted of 4 locomotives and a total of 43 freight wagons. The freight wagons were fitted with cast iron brake blocks. 5AMP3P, operated by Patrick, was driven by drivers employed by Genesee and Wyoming Australia Pty Ltd (GWA). The train and its wagons were maintained by Downer EDI Rail.
- 6) I note here that Patrick and GWA elected to combine their representation.
- 7) Three GWA employees, Messrs Walding, McGowan and Catchpool, were in the driver's cabin of 5AMP3P at the time of the fires. All gave evidence.
- 8) Douglas Bath and Geoffrey Robertson were the owners of two adjoining properties which were allegedly damaged by the Wingeel fires.¹

The objectives of an inquest into fire

4. The Coroners Act 1985, which applies to this inquest, sets out the duties of a Coroner when investigating a fire.²

5. Section 36

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

Eye Witness Accounts

6. The evidence before this inquest establishes that by 10.00am on the 2nd of February 2001 the conditions in the Wingeel Plains region were hot with a wind blowing from the north.³

¹ The fact that damage was sustained by the property holders was broadly accepted and was not examined in any great detail. I considered that the extent of the damage sustained was not a matter, which was within my jurisdiction.

² See *Coroners Act 1985*, part VI.

³ Evidence of eye witnesses generally and Dinah Jacobs at transcript page 3.

7. Mr Scott Churnside owns a property that is situated about 3 km south of the Hamilton Highway, part of which immediately borders the railway line running between Geelong and Gheringhap. On the day of the fire circumstances were such that Mr Churnside, changed his plans to allow for the possibility of the outbreak of fire, which he anticipated being called upon to fight.

8. He testified that he was informed of the outbreak of fire on his property within paddock 25 by machinery salesman, John Jacobs, who drove into his homestead at approximately 10.00am. According to Mr Churnside, this fire commenced just adjacent to the railway line and was brought under control by his own tanker and fire crew. Paddock 25 runs adjacent to the Hamilton Highway and the train line was about 200 metres south of the highway.

9. Another fire commenced at around 10.00am in several places adjacent to the line, also between Geelong and Gheringhap. Fire Investigator, Mr Barnes, stated that the fire extended in an easterly direction for about 2.1 km along the railway reserve and also gave evidence that there was a further ignition point about 5.25 km along the reserve east of the Barpinda Poornet Junction.⁴

10. The evidence of Messrs Churnside and Barnes was to the effect then that the ignition points of the fires on the morning of the 2nd of February were spread along approximately 8 km of the grassed area adjacent to the railway line. The western most point of ignition was some 200 metres distant from the Hamilton Highway.

11. There was no dispute that at this time the only train in the vicinity was the Patrick run freight train, 5AMP3P.

12. This picture, and the nexus between the railway line (and 5AMP3P), and the ignition of the various fires in the area was supported by the evidence of Mrs Dinah Jacobs and Mr Gregory Stone.

13. Mrs Jacobs testified that she had been driving with John Jacobs along the Hamilton Highway at around 10.00am on the 2nd of February travelling in a westerly direction.

*"(I) saw a fire about 500 metres on the road ahead of me. The fire was situated on a slight incline in the road. I only saw the one fire and I could actually see the fire itself I looked in the foreground and saw a train travelling along the track adjacent to the road, heading in our direction. The train was travelling away from the fire. I can remember seeing a small fire starting from the north side of the train. I did not see a spark or anything like that. It only caught my eye when it flared up. I can't recall whether at the time I saw this fire, the train was still passing us or whether it had already passed. This fire fizzled out pretty quickly When the train had passed where we were I could see on the other side or south side of the train that there were four or five different fires spreading from the track making their way south. They were only fairly small fires at this stage and a fair distance apart, I would guess about 30 to 40 metres apart."*⁵

⁴ See exhibit 9 page 2.

⁵ See exhibit 1, page 1.

14. Mr Gerald Stone stated that he also had been driving in a westerly direction along the Hamilton Highway at around 10.00am on the 2nd of February 2001 when he saw a train coming towards him and the fires commencing as the train approached.

"The first thing I noticed was the train coming out of its own haze"

Q: and as it was proceeding along this train was lighting up the track, lighting up the grass?

A: - it certainly was

Q: When you say the fire trailing out from behind, it what do you actually mean by that?

*A: Well, basically the ignition on both sides of the track was - as the train went further away it was just leaving both sides of the track on fire."*⁶

The Train Crew

15. Evidence as to their observations was also given by the train crew on board 5AMP3P.

16. According to these witnesses they first became aware of the train's possible connection with the ignition of fires when the train was brought to a halt prior to its entry on to the side track at the Wingeel Loop. As the train was about to stop, driver observer, Mr Catchpool noticed smoke at the rear of the train and informed the others in the cabin. According to his evidence, it was suggested by a nearby railway worker, 'that the train may have started the fire.'

17. Certain necessary formalities were then adhered to. The train was driven on to the loop and on the instructions of ARTC train control, the driver, commenced to perform a check of the train.

18. Crew members, Messrs Catchpool and Walding then walked from the lead locomotive along the length of the train, a distance of some 950 metres, each walking on opposite sides of the train.

Wagon AQQY 4327

19. Towards the rear of the train, they located wagon AQQY 4327 which was found to have the metal brake blocks positioned hard against two wheels.

20. Mr Catchpool and Mr Walding were unable to reposition the malfunctioning brake blocks, which were described as being 'warm'. Accordingly, they returned along the length of the train to the locomotive to get tools following which Mr Walding and Mr McGowan returned with their tools and attempted to loosen the brake blocks. This attempt was again unsuccessful. Given the difficulties which confronted them, they took action to disable the brakes altogether. This, by tying the brake blocks away from the wheels with wire, thereby allowing the train to proceed to Melbourne without further incident.

⁶ See transcript from pages 98 to 103.

An Earlier Incident

21. Mr Walding was questioned about an email he sent on the 19th of February 2001 in which he referred to a report from an oncoming train operator, of sparks being emitted from the rear of 5AMP3P as it passed through the town of Petwood in the Adelaide Hills, on the night of the 1st of February. Mr Walding expressed the opinion that the crew's action, which involved their reducing the wagons' air brake pipe pressure, was an appropriate response to that report.⁷

The Surrounding Vegetation

22. The track at the Barpinda Poorneet Junction runs approximately through the centre of the rail reserve, which extends in each direction. The track is supported by ballast, a raised section of material that varies in width depending upon the extent to which the ballast may be elevated. On each side of the ballast is a further section of reserve extending to the boundary of the adjoining property.

23. Within the reserve is an access road which broadly runs adjacent to the rail track. Due to variations in the terrain which includes the presence of large rocks and to the slope of the land, the precise dimensions and position of the access varies. The vegetation in the area of the said reserve was high at the time of the fire.⁸

24. The history of fires in this area (the approach or 'leading to' the Wingeel loop), was given by Mr Bath.⁹

Finding

I direct myself in regard to the burden and standard of proof which applies in these proceedings and as to the circumstances in which the drawing of inferences from circumstantial evidence is legally permissible.

Having reviewed all of the evidence as well as submissions by Counsel:

- 1) I find myself satisfied to a comfortable satisfaction that the fires known as the Wingeel Plain fires commenced on the 2nd of February 2001, at or near the rail track leading to the Wingeel loop and were ignited when sparks and/or molten metal from Wagon AQQY 4327 came into contact with dry grass surrounding the track as Patrick train 5AMP3P approached the Wingeel loop.

⁷ It is apparent from their actions as reported by Mr Walding, that the crew accepted the accuracy of the report passed on from Petwood, concerning the emission of sparks from the rear of the train.

⁸ See discussion at transcript page 432.

⁹ See evidence of Mr Bath from Transcript p.20.

- 2) I am further satisfied that the air braking system attached to Wagon AQQY 4327, had a history of failure which failure had resulted in excessive wear to the wagon's metal brake blocks. When this occurred such failure increased the risk that either sparks or molten metal, would cause ignition upon adjacent grassland and that it was this same failure which resulted in the outbreak of the fire under investigation.

I have considered the evidence of EDI Rail engineer John Jasson and given particular attention to his view that Wagon AQQY 4327 was appropriately maintained and by inference that wagon brake maintenance failure was not a factor in the Wingeel fire. I reject this opinion.

Rather, I find that the system employed by EDI Rail of not keeping a history of brake block replacement and of replacing metal brake blocks without regard to the history of any particular wagon was inadequate and not in the public interest and contributed to the events of the 2nd of February.¹⁰

I further find that those responsible for maintenance (Patrick's and EDI Rail), understood the possible consequences of a wagons metal brake blocks failing to retract, and contributing to a rural grass fire.

- 3) I also find that on the day before the Wingeel Plains fire, sparks had been seen falling from a rear wagon, at or near Petwood in the Adelaide Hills. The wagon in question may or may not have been AQQY 4327. I am satisfied from their conduct that the crew of 5AMP3P believed that those sparks were also caused by air brake failure and that certain steps were then taken to attempt to address that matter.
- 4) I accept that it is a difficult task to maintain rail track and rail corridors and sidings to a satisfactory standard over an area of the size of our national rail system. However, the area in question was something of a black spot and the failure of EDI Works to maintain this area also contributed to the fire.

¹⁰ See Exhibit 14K(1) See also the increasing level of brake block replacement on wagon AQQY 4327, in the period before the Wingeel Plains fire, with 18 brake blocks being replaced on this wagon between the 27th December 2000 and the 1st February 2001.

COMMENTS

1. The possibility of fire in this particular location was heightened by a confluence of circumstances.
2. These included the decision to use the air braking system with the dynamic braking system to reduce speed while negotiating this lengthy area of track, the surrounds to which were in a flammable condition.
3. I further note that the deployment of the air braking system, as opposed to the slowing of the train by other means, unknowingly resulted in the metal braking blocks engaging the wheels over an extended period and to the subsequent outbreak of the fire.
4. The contributing circumstances also included the prevailing weather conditions and the failure by those responsible to identify and properly address the difficulties with the air braking system referred to above.

RECOMMENDATIONS:

Pursuant to section 72(2) of the **Coroners Act 2008**, I make the following recommendation(s) connected with the fire:

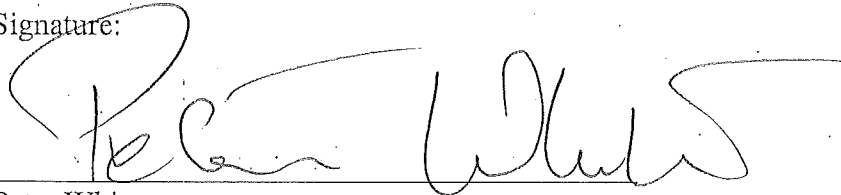
I note here my view that a lengthy history teaches that our rural properties and those who reside there, are constantly put at risk of the consequences of fire, (and with having to deal with the difficulties we face with the suppression of fire).

1. Having so directed myself, I recommend that the train maintenance provider (in this case EDI Rail Pty Ltd) reviews its existing procedures for the maintenance of all wagon stock under its control, to ensure that the maintenance to those remaining braking systems which include metal brake blocks, is comprehensively recorded in each instance. This recording should, as a minimum, permit the responsible engineer to signify by signature his/her acceptance of a knowledge of all engineering work carried out on the particular wagon system over the previous 12-month period, this prior to the installation of a new metal brake block or related maintenance task.
2. I also recommend the train operator requires a written report from the senior driver of each freight train following the completion of each trip which crosses rural property, which report sets out the drivers observations in regard to areas surrounding the track which have the potential to contribute to the outbreak of fire. The training of each driver should be required to emphasize this matter.

3. Finally, I recommend that the Minister for Transport in the State of Victoria seek to have the responsible Federal Authority require (insofar as they are still in use) that metal brake blocks be withdrawn from all freight wagon air breaking systems operating in this State, and by extension throughout the Commonwealth.

Clearly should this final recommendation be introduced, the need to maintain the records recommended in Recommendation (1) above, will be obviated from the time of each such amendment.

Signature:



Peter White
Coroner

Date: 4th April, 2011

Distribution:

The Minister for Transport in the State of Victoria.

The Attorney General in the State of Victoria.

VicTrack.

Australian Rail Track Corporation.

Downer EDI.

Patrick Portlink Pty Ltd.

Genesee and Wyoming.

Douglas Bath.

Geoffrey Robinson.

