IN THE CORONERS COURT

OF VICTORIA

AT MELBOURNE

Court Reference: COR 2016 3244

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 60(2)

*Section 67 of the **Coroners Act 2008***

I, AUDREY JAMIESON, Coroner having investigated the death of EUGENE WILLIAM TWINING

without holding an inquest:

find that the identity of the deceased was EUGENE WILLIAM TWINING

born 3 June 1928

and the death occurred on 15 July 2016

at The Alfred Hospital, 55 Commercial Road, Melbourne, Victoria 3004

from:

1 (a) ISCHAEMIC BOWEL IN A MAN WITH FRACTURED PELVIS SECONDARY TO A MOTOR VEHICLE INCIDIENT (PEDESTRIAN)

Pursuant to section 67(1) of the **Coroners Act 2008**, I make findings with respect to **the following circumstances**:

1. Eugene William Twining was 88 years of age at the time of his death. He lived with his partner, Mary Harper in Camberwell.

2. At approximately 3.45pm on 13 July 2016, Patrick Bombaci drove his 1981 Kenworth cab over 9.8 tonne truck in northerly direction along Burke Road in Camberwell.

3. Traffic was congested and Mr Bombaci was driving at approximately 10 km/h. Mr Bombaci slowed to a stop as he approached a red traffic light at a pedestrian crossing approximately 140 metres north of Camberwell Junction, which is on a slight incline.

4. Emma Ryan-Reid was waiting to cross the road at the pedestrian crossing. She noted traffic was moving slowly and that Mr Bombaci's truck and another vehicle were in the pedestrian zone as the light turned red. The vehicle in front of Mr Bombaci's truck drove through the crossing. Mr Bombaci began to drive forward then stopped '*half-way through the cross walk*'. There were no other vehicles between Mr Bombaci and the pedestrian crossing. Ms Ryan-Reid made eye contact with Mr Bombaci as she crossed to the eastern side of Bourke Road.

5. A short time after crossing the road Ms Ryan-Reid turned around and saw Mr Twining run directly in front of Mr Bombaci's truck. Mr Bombaci's truck struck Mr Twining knocking him to the ground and the truck tyre began to roll onto Mr Twining's right hip. Ms Ryan-Reid yelled for Mr Bombaci to 'stop' and he immediately applied the brakes.

6. Ms Ryan-Reid went to Mr Twining's aid and contacted Emergency Services. Other witnesses attended the scene to provide assistance. Mr Twining raised himself from the ground and sat in a chair on the road provided by a nearby café employee. A doctor attended the scene and advised Mr Twining to lie down due to a head wound. Paramedics arrived shortly after and noted Mr Twining was completely conscious and alert. He was unable to lift his left hip and experienced pain upon movement. Mr Twining was hesitant to attend hospital, but agreed to do so if paramedics made contact with his partner Ms Harper. Paramedics attended Mr Twining's residence in Camberwell, advising Ms Harper of the situation. Mr Twining was then transported to the Emergency Department of the Alfred Hospital.

7. On admission, Mr Twining was found to have multiple pelvic fractures and a pelvic haematoma. He developed an acute kidney injury and was experiencing abdominal pain and delirium. No cause for the abdominal pain was found on the computed tomography **(CT)** scan apart from portal vein thrombosis. Mr Twining's condition continued to deteriorate. Following a review by trauma Professor Fitzgerald a discussion was held

between Mr Twining's family and the Intensive Care Unit consultant, Dr McGloughlin. Given the severity of Mr Twining's condition it was decided Mr Twining was not for intubation or escalation of treatment. On 15 July 2016 at approximately 7.30pm, Mr Twining was declared deceased.

INVESTIGATIONS

Forensic pathology investigation

8. Dr Michael Burke, Senior Forensic Pathologist at the Victorian Institute of Forensic Medicine (**VFIM**), performed an autopsy upon the body of Mr Twining, reviewed a post mortem CT scan and referred to the Victoria Police Report of Death, Form 83. Dr Burke noted the post-mortem examination showed an ischaemic segment of large bowel. There was associated severe atheroma within the aorta. It is probable an atheromatous plaque raptured and embolised down the inferior mesenteric artery, resulting in the bowel ischaemia.

9. The autopsy findings also revealed a fractured pelvis (external fixateurs), aortic valve replacement – no vegetations and mild cardiomegaly.

10. Toxicological analysis of Mr Twining's blood samples provided by the Alfred Hospital detected morphine[1], oxycodone[2], metoclopramide[3], paracetamol and lignocaine[4]. At least some of these drugs would have been administered by medical personnel.

Police investigation

11. At the time of the collision there was a slight amount of rain falling and the weather was overcast. Police conducted a preliminary breath test of Mr Bombaci and did not detect any alcohol, common drugs or poisons.

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[1] Morphine is a narcotic analgesic used to treat moderate to severe pain.

[2] Oxycodone is a semi-synthetic opiate narcotic analgesic related to morphine used clinically to treat moderate to severe pain.

[3] Metoclopramide is an anti-emetic drug used for the treatment of nausea and vomiting.

[4] Lignocaine is a local anaesthetic often administered to patients prior to surgery or during resuscitation attempts.

12. Mr Bombaci did not hold a valid Victorian Heavy Rigid Licence as it had previously expired.

13. Senior Constable Ferdi Cokelek (**SC Cokelek**) was the nominated Coroner's investigator.[5] At my direction, SC Cokelek conducted an investigation of the circumstances surrounding Mr Twining's death, including the preparation of the coronial brief. The coronial brief contained, *inter alia*, statements made by Alison Jones, Mr Twining's step-daughter, Dr David McDonald of the Alfred Hospital, Dr Morris Snider, Mr Twining's General Practitioner, Mr Patrick Bombaci, and three members of the public who rendered assistance.

14. In the course of the investigation, Victoria Police learned that Burke Road, Camberwell is a dual lane carriage way with provision for two lanes of travel. Both sides of the road have car parking spaces, reducing the roadway to one lane of travel in either direction. The speed limit is 40km/h. The topography of this section of Bourke Road is an upward slope.

15. Approximately six years prior, Mr Twining partner, Ms Harper was diagnosed with Parkinson's disease and Mr Twining became her carer. He was an active member of investment discussion groups and a current issues discussion group. His step-daughter, Ms Jones stated he was '*still very mentally capable*'. In the month prior to his death he was minding Ms Jones' dog, Bella and would take her for an hour long walk twice a day.

16. Mr Twining had attended his General Practitioner, Dr Morris Snider for approximately 14 years. From approximately mid-2015 Mr Twining noted he was feeling depressed and had lost three to four kilograms.

17. On 17 June 2016, Mr Twining performed a Mini Mental State examination and the results indicated that mild cognitive impairment was present. On 24 June 2016, Mr Twining presented to Dr Snider to discuss his recent cognitive decline. Mr Twining noted he had become irritable, had lost his speed reading skills and was worried that he may have developed Alzheimer's disease. Mr Twining noted he drank three to four standard alcoholic drinks approximately four times per week. He indicated he did not

[5] A Coroner's investigator is a police officer nominated by the Chief Commissioner of Police or any other person nominated by the Coroner to assist the coroner with his/her investigation into a reportable death. The Coroner's investigator receives directions from a coroner and carries out the role subject to those directions.

wish to see someone regarding his memory and Dr Snider discussed the relationship between alcohol and cognitive function decline.

18. In his statement Mr Bombaci said, his truck was carrying a full load of soil from an address in Burke Road Glen Iris to his residential address. Traffic had slowed down on Burke Road and he saw the approaching pedestrian lights change to red. Mr Bombaci said he stopped at the crossing '*around the line where the pedestrians cross. Past the thicker line where I was meant to stop*'. He waited approximately one minute for pedestrians to cross and began to slowly take off once the light had turned green. After approximately half a metre he heard people yelling to him stop. He immediately applied the brakes and looked outside his driver's side window. At this point he saw Mr Twining on the ground about two feet from his front tyre beside the truck and was unware at this point that his vehicle had made contact with Mr Twining.

19. On 27 July 2017, Mr Bombaci was fined $1000.00 without conviction for Unlicensed Driving at the Melbourne Magistrates' Court.

Further Investigation

20. SC Cokelek requested details from VicRoads as to the operation of the traffic signals at the Pedestrian Operated Signals near Burke Avenue, Camberwell. VicRoads data showed no record of a fault report or fault alarm at this site at the time of the collision.

Previous coronial recommendations and responses

21. In the Finding Without Inquest into the death of James Sawbridgeworth,[6] delivered on 9 June 2016, Coroner Paresa Spanos identified that Mr Sawbridgeworth, who used a walking frame to ambulate, died after walking in front of a 1995 Mack prime mover, which had been stopped in traffic.

22. Coroner Spanos requested the Coroners Prevention Unit[7] (CPU) assist her with the investigation into Mr Sawbridgeworth's death. The CPU advised that crash avoidance

[6] COR 2014 5064

[7] The Coroners Prevention Unit (CPU) was established in 2008 to strengthen the prevention role of the coroner. The unit assists the coroner with research in matters related to public health and safety and in relation to the formulation of prevention recommendations, as well as assisting in monitoring and evaluating the effectiveness of the recommendations. The CPU comprises a team with training in medicine, nursing, law, public health and the social sciences.

systems (including features such as forward collision warning, pedestrian and bicycle warnings) are now available for retrofitting to trucks, to mitigate the incidents of collisions with pedestrians. However, Her Honour identified that such systems are not without limitations as, although they provide visual and auditory warnings, they still require the driver to take evasive action within (in one example) two seconds of the warning being given.

23. At the conclusion of the investigation into Mr Sawbridgeworth's death, Coroner Spanos recommended that the Transport Industry Safety Group considers the particular challenges to pedestrian safety – especially those older and more vulnerable pedestrians – posed by trucks and heavy vehicles with limited forward visibility and considers developing a strategy to highlight this road safety issue to the public at large, and to truck and heavy vehicle operators and drivers in particular.

24. In response to the recommendation, The Honourable Luke Donnellan, MP, the Minister for Roads and Road Safety, wrote a letter to the Court dated 7 October 2016. Mr Donnellan advised that Coroner Spanos' recommendation would be implemented and stated that the Finding would be considered by the Transport Industry Safety Group at its next meeting in late 2016.

25. By way of letter dated 17 March 2017, Peter Anderson, Chief Executive Officer of the Victorian Transport Association Inc. **(VTA)**, confirmed that the recommendation would be implemented. Mr Anderson advised that due to a range of reasons, the Transport Industry Safety Group did not meet in the second half of 2016. However, the VTA was in the process of convening a meeting of the Group's members in late April 2017. Mr Anderson added that the second phase of the VicRoads Travel Happy campaign had commenced in February 2017, and incorporated key messaging in relation to heavy vehicle blind spot awareness. Mr Anderson acknowledged that the issue whereby the driver of a heavy vehicle has not seen a pedestrian was clearly a major concern.

26. In the Finding Without Inquest into the death of Constantinos Bekiaris,[8] delivered on 5 June 2017, I identified that Mr Bekiaris, a man with impaired hearing and mobility died after walking in front of a prime mover that was stationary in southbound traffic on Burnley Road in Richmond.

[8] COR 2016 1102

27. At the conclusion of the investigation into Mr Bekiaris' death, I recommended that the VTA and the Transport Industry Safety Group continue to investigate previously identified concerns about the lack of forward visibility in trucks and heavy vehicles, and what can be done to improve pedestrian safety.

28. By way of letter dated 5 September 2017, Mr Anderson confirmed that the recommendation would be implemented. Mr Anderson advised that the VTA had consulted with leading heavy vehicle manufacturers and suppliers in relation to 'collision avoidance' technology. The technology is available and can be retrospectively fitted to a heavy vehicle, however the costs to deliver this outcome are commercially prohibitive for the majority of heavy vehicle operators.

29. Mr Anderson further advised, the Australian Design Rules (ADRs) do not specify the fitting of forward collision technology to heavy vehicles as a standard. Such equipment is deemed as optional fitment coming at an additional cost. The VTA have specified that the ADRs need to be amended in order that front warning sensors and side sensors are installed at the point of manufacturer for all cab-over heavy vehicles with a Gross Vehicle Mass equal to or greater than 4.5 tonne. This was highlighted in the VTA submission to the *Senate Standing Committee on Rural and Regional Affairs and Transport References Committee Inquiry (March, 2016).*

30. The VTA have established a working party with VicRoads to review the heavy vehicle licensing requirement to improve driver skills and safer driving behaviours. In 2017, the VTA in conjunction with a leading driver education provider has implemented a comprehensive heavy vehicle 'Driver Delivery' program where pedestrian safety and 'blind spot' awareness for drivers is integrated into the program's training approach.

31. Mr Anderson added the VTA continues to support the VicRoads Travel Happy campaign, and plans to further expand key messaging in relation to heavy vehicle blind spot awareness. The VTA is also working through the Victorian Road Freight Advisory council to develop a strategy to address this serious issue.

32. Mr Anderson's response to the Court highlights the VTA and the Transport Industry Safety Group's commitment to continue to investigate concerns about the lack of forward visibility in trucks and heavy vehicles, and what can be done to improve

pedestrian safety. I look forward to receiving the reports from VTA as to the outcomes of their activities.

33. In the Finding Without Inquest into the death of Josephine Edden[9] delivered on 20 September 2017, Coroner Paresa Spanos identified that Ms Edden was struck and killed by a garbage truck as she crossed the road at the intersection of Collins Street and Spencer Street. Her Honour asked the CPU to search coronial data and advise as to the frequency of pedestrian fatalities involving a collision with a truck/heavy vehicle that had commenced moving forward from a stationary position, with a driver apparently not seeing the pedestrian.[10]

34. By reference to Victorian coronial data for the period from 1 January 2000 to 31 October 2016, the CPU identified 80 deaths of pedestrians, who died as a result of injuries sustained in a collision involving a truck or heavy vehicle.[11] Of these deaths, the CPU identified 42 deaths where it appeared the truck or heavy vehicle driver did not see the pedestrian before the collision and 18, death, where a stationary truck collided with an unobserved pedestrian after it commenced moving forward from a stationary position.[12]

35. At the conclusion of the investigation into Ms Edden's death, Coroner Spanos recommended that VicRoads convene a working group to examine technological solutions to improve pedestrian visibility to heavy vehicle operators.

36. By way of letter dated 20 October 2017, Anita Curnow, Executive Director - Access and Operations of VicRoads, confirmed that the recommendation would be implemented. Ms Curnow advised VicRoads is participating in a truck standards working group to improve safety for vulnerable road users. The aim of the group is to increase the safety

[9] COR 2016 0794.

[10] Please note that Ms Edden's death occurred before Mr Bekiaris' death.

[11] The CPU included light trucks but excluded large four wheel drive vehicles and utilities. Also excluded were intentional deaths and possible suicides, thus focusing upon accidents proper.

[12] In preparing the report pertaining to the death of Josephine Edden the CPU reviewed and updated a data report on heavy vehicle related pedestrian related fatalities prepared previously for Coroner Spanos in the death of James Sawbridgeworth. The data review and update process led to the identification of new deaths that had not been included in the data report relating to the death of Mr Sawbrigeworth. This may occur due to iterative improvements in the CPU database search and death identification strategies, as well as changes in the database contents as deaths are reviewed and recoded upon completion of Coronial investigations. CPU data reports always reflect the CPU's best and most accurate understanding of morality data at the time the report is produced, but are subject to review.

standards of heavy vehicles being used on major Victorian transport construction projects.

37. The working group has identified a number of truck design features and technologies that may be effective and is currently assessing these measures to potentially improve truck drivers' visibility of vulnerable road users, alerting them to any vulnerable road users in close proximity or having other vulnerable road user safety benefits.

38. Following this assessment, measures will be prioritised, with a view to recommending fitment of the most effective measures to relevant trucks through contracts related to major Victorian transport construction projects. This knowledge will also be shared with and useful for the wider application in the heavy vehicle industry.

COMMENTS

Pursuant to section 67(3) of the **Coroners Act 2008**, I make the following comments connected with the death:

1. On 13 July 2016, Mr Twining ran in front of a Kenworth cab over 9.8 tonne truck in northerly direction along Burke Road in Camberwell and was struck by the vehicle. He was admitted to the Alfred Hospital where his condition continued to deteriorate. Mr Twining was declared deceased on 15 July 2016. At the time of the accident, the driver of the Kenworth cab Mr Bombaci did not hold a valid Victorian Heavy Rigid Licence.

2. It is both unsatisfactory social behaviour and a breach of the law to drive unlicensed however it is the design of the cab that caused Mr Bombaci to be unable to see Mr Twining. Mr Bombaci's unlicensed driving has been dealt with in the criminal jurisdiction so I make no further comment in this regard.

3. It is apparent that more needs to be done to progress improvement in this area.

RECOMMENDATIONS

Pursuant to section 72(2) of the **Coroners Act 2008**, I make the following recommendations:

1. With the aim of improving public health and safety and in particular pedestrian safety, **I recommend that** the Australian Design Rules as administered by the Australian Government under the *Motor Vehicle Standards Act 1989* are amended to require that front warning sensors and side sensors are installed during manufacturing for all cab-over heavy vehicles with a Gross Vehicle Mass equal to or greater than 4.5 tonne.

FINDINGS

The investigation has identified that Mr Bombaci was unable to see Mr Twining when he struck him with the Kenworth Truck. Mr Bombaci was unable to see Mr Twining from the driver's seat of the Kenworth Truck due to the design of the cab and the proximity of Mr Twining to the vehicle.

This issue and its inherent dangers has been identified in a number of Coronial Findings; The Transport Injury Safety Group, VicRoads and the Victorian Transport Association have responded to the Court and indicated their willingness for change which may improve pedestrian safety.

I accept and adopt the medical cause of death as identified by Dr Michael Burke and find that Eugene William Twining died from ischaemic bowel in a man with fractured pelvis secondary to a motor vehicle incident (pedestrian).

Pursuant to section 73(1A) of the *Coroners Act 2008,* I order that this Finding be published on the internet.

I direct that a copy of this finding be provided to the following:

Ms Mary Harper, Senior Next of Kin
Mrs Alison Jones
Ms Sarah Larwill, Alfred Health
Transport Industry Safety Group
Victorian Transport Association Inc.
Victorian Minister for Roads and Safety
Commonwealth Minister for Infrastructure and Transport
Senator Barry O'Sullivan, Chair of the Senate Standing Committees on Rural and Regional Affairs and Transport
Senior Constable Ferdi Cokelek

Signature:

AUDREY JAMIESON

CORONER

Date: **28 June 2018**