IN THE CORONERS COURT

OF VICTORIA

AT MELBOURNE

Court Reference: COR 2015 5735

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 DOMINIC RIGANO

without holding an inquest:

find that the identity of the deceased was DOMINIC RIGANO

born 24 August 1933

and the death occurred on 10 November 2015

at 205 Anderson Hill Road, Loch Victoria 3945

from:

1 (a) INJURIES SUSTAINED IN A TRACTOR INCIDENT (DRIVER)

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

1. Dominic[1] Rigano was 82 years of age at the time of his death. Mr Rigano lived at 61 Mahon's Road Ferndale, on a dairy farm he operated with his sons Joseph and Andrew. He also co-owned a 500 acre property located at 205 Anderson Hill Road, in Loch, with his nephew Ross Rigano. The Loch farm was used to raise beef cattle. Mr Rigano was in largely good health; his medical history included hypertension and osteoarthritis of the knee.

2. On the morning of 10 November 2015, Mr Rigano milked cows at the Ferndale farm. At approximately 9.00am, Mr Rigano ate breakfast with his sons and informed them he was

[1] I note that Mr Rigano's first name is variously listed as Domenic, Dominic and Domenico in different parts of the coronial brief and evidence. For consistency, I have referred to Mr Rigano as Dominic Rigano throughout this Finding.

planning to do some tractor work and spraying of thistles at the farm in Loch. Mr Rigano did not return to Ferndale as he usually would at about 3.30pm, to assist with afternoon milking. Attempts were made to contact him by telephone, but there was no answer. When the milking finished at 6.15pm, Joseph and Andrew became increasingly concerned.

3. Both of Mr Rigano's sons drove to the Loch farm and commenced a search. Between 7.00pm and 7.30pm, they located Mr Rigano's Holden Statesman vehicle parked in the machinery shed on the property; the red 1981 Massey-Ferguson tractor was not there. In separate vehicles, Joseph and Andrew searched the paddocks. At approximately 7.45pm, after Joseph heard the sound of the tractor engine, the brothers located the tractor. It was bogged in a gully and still in gear. One rear wheel and one front wheel were spinning and the weed spray tank was still fitted. It appeared that the tractor had rolled down a steep incline in to the muddy creek at the bottom of the gully. Mr Rigano was located several metres from the tractor and appeared to have suffered severe chest and leg injuries. It was apparent that he was already deceased. Emergency services were contacted, and ambulance paramedics, followed by police and WorkSafe investigators attended. Ambulance paramedics were unable to find signs of life and confirmed that Mr Rigano was deceased.

INVESTIGATIONS

Forensic pathology investigation

4. Dr Heinrich Bouwer, Forensic Pathologist at the Victorian Institute of Forensic Medicine performed a full post mortem examination upon the body of Mr Rigano, reviewed a post mortem computed tomography (CT) scan and referred to the Victoria Police Report of Death, Form 83. At autopsy, Dr Bouwer found multiple chest, neck and leg injuries, consistent with being sustained in a tractor incident. There was no significant natural disease detected. Toxicological analysis of post mortem blood only identified paracetamol.[2] Dr Bouwer ascribed the cause of Mr Rigano's death to injuries sustained in a tractor incident as a driver.

[2] Paracetamol is an analgesic drug available in many proproprietary products.

Police investigation

5. Leading Senior Constable (LSC) Gary Slink, the nominated coroner's investigator,[3] conducted an investigation of the circumstances surrounding Mr Rigano's death, at my direction, including the preparation of the coronial brief. The coronial brief contained, *inter alia*, statements made by Joseph Rigano, Ross Rigano, WorkSafe Senior Engineer and Inspector Andrew Taylor and Qualified Mechanic Ross Beischer. The brief also contained a summary of Mr Rigano's medical records at Korumburra Medical Centre.

6. Joseph Rigano reported that his father was still capable of managing his properties, including tractor works. Ross Rigano stated that he and his uncle Mr Rigano shared duties at the Loch farm, including maintenance, cattle and farm management. On 10 November 2015, Ross stated that he was working at his other farm in Leongatha, and was not aware that Mr Rigano was at the farm at Loch. The red four wheel drive Massey Ferguson 154.4 diesel tractor was used primarily for feeding hay and spraying weeds. It was fitted with a 400 litre spray tank and they had been spraying at the property since October 2015.

7. Ross used the tractor on 6 November 2015 to spray weeds and believed the tractor was functioning correctly. The brakes, engine and hydraulics were operating and the tyres were in good condition. Ross noted that the Loch property had some very steep parts and said his uncle was well aware of the risks; he had worked at the property for over fifty years. Joseph recalled driving the same tractor a couple of months before the incident, without issue.

8. Joseph stated that he was surprised to see where the tractor had rolled from. He could not offer any explanation as to why the tractor had continued across a small gully onto the steep incline. Ross did not understand where Mr Rigano was heading when he was spraying, and believed he was in trouble from the moment he left the flat piece of land. LSC Slink noted that tyre marks were located higher up the embankment, which were consistent with the tractor having moved forward from a relatively level area onto a slope, the rear left wheel lifting off the ground and the other three wheels briefly sliding to the right before the tractor commenced rolling over, impacting the ground at a number of locations and shedding parts on its way down the slope.

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[3] 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 takes instructions direction from a coroner and carries out the role subject to the direction of a corner.

9. WorkSafe Inspector Taylor attended the incident site and observed that a roll over protection system (ROPS) was fitted to the tractor, in the form of a four post frame. The frame extended over and around the operator's seat. WorkSafe Inspector Taylor did not observe any structural damage to the ROPS as a result of the incident. There was no enclosed cabin fitted and no windscreens, windows or doors. He also noted that there was no seatbelt fitted to the tractor. In the event of a rollover, the seatbelt would assist in holding the operator onto the seat and worked in conjunction with the protective structure to keep the operator within a 'frame of safety', preventing the operator from being thrown from the tractor.

10. WorkSafe Inspector Taylor opined that the terrain was the main contributing factor to the incident. However, the lack of a seatbelt being fitted and worn contributed to the outcome of the incident, as it allowed the operator to be thrown from the tractor and into a position where the operator may have been struck by the overturning tractor.

11. In addition, WorkSafe Inspector Taylor noted that WorkSafe have published a handbook entitled 'Safe use of tractors with attachments', dated June 2009. This publication provides guidance in respect to tractor roll overs and details that 'seatbelts on tractors can save lives by preventing operators being ejected from the tractor seat. Where there is a risk of roll over, the seatbelt keeps the operator within the protected ROPS area and prevents the operator from being thrown in front of the wheel or implements. Where there is a risk of the operator being ejected, a seatbelt must be worn. If the tractor does not have a seatbelt, it is recommended that a seatbelt is fitted where reasonably practicable.'

12. On 11 November 2015, Qualified Mechanic Ross Beischer inspected the tractor at the Loch property, upon the request of WorkSafe. Mr Beischer noted that mud was piled in front of the tractor's rear wheels, indicating that after the incident, the engine was still running with the tractor transmission in reverse gear. Mr Beischer noted that the tractor was fitted with a retro fitted type seat, which was not fitted with a seatbelt. He observed a sticker on the tractor's dash which stipulated 'keep seatbelt fitted'.

13. Mr Beischer reported that the tractor's braking mechanisms appeared to be functioning correctly, and the clutch was operating in a functional manner. Mr Beishcer inspected the primary steering components, which all appeared to be intact. All the tyres were in good to very good condition, and Mr Beischer noted that this type of tyre tread has good traction on sloped terrain. The wheel spread was set at the widest setting, which is recommended for

operation on sloped ground. The spray unit had a 400 litre capacity, and held about 150 litres of product at the time of inspection. In summary, Mr Beischer found that the tractor appeared mechanically sound with no mechanical faults identified that may have contributed to the tractor rolling over. For its age, the tractor was in good general condition.

14. Mr Beischer noted that the embankment that the tractor had apparently traversed was steep. He could not estimate the actual slope degree of the embankment, but said it should have been obvious to an experienced operator that the tractor should never have been driven on the slope. Mr Beischer opined that any attempt to operate the tractor on the slope was fraught with danger, as there was an obvious risk that the tractor would roll over.

15. On 27 October 2016, the Court corresponded with WorkSafe Victoria and was informed that their investigation into Mr Rigano's death had been discontinued.

Coroners Prevention Unit investigation

16. Following the receipt of the coronial brief, I asked the Coroners Prevention Unit (CPU)[4] to review the circumstances of Mr Rigano's death and investigate the prevalence of tractor-related deaths in Victoria.

17. The investigation identified that between 1 January 2000 and 21 November 2016, 95 Victorians died in tractor-related circumstances. Of these deaths, 19 (or 20%) occurred in a setting where the tractor rolled over. The majority of the deaths (89.5%) were male. It was identified that in two of these deaths, including the death of Mr Rigano, the tractor was not fitted with a seatbelt. In a further death, the tractor was fitted with a seatbelt, but the operator was not wearing it at the time of the incident. However, it was noted that this may not present an accurate picture of the role of seatbelts, as the research was limited by the information that was available relating to the circumstances of each death.

[4] 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.

COMMENTS

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

1. The response to farming fatalities involving tractors and quadbikes has often focused upon the need for roll over protection systems. However, Mr Rigano's death has highlighted the fact that without a fitted seatbelt, roll over protection systems do not prevent deaths in a roll over incident.
2. I note that this issue has arisen previously in Victoria's coronial jurisdiction. On 30 September 2004, the then State Coroner, Graeme Johnstone, recommended following the death of Stanley Morris[5] that 'WorkSafe along with farming organisations (ie. The Farmsafe Alliance), relevant unions and tractor manufacturers / distributions consider undertaking a project to investigate the feasibility of designing and manufacturing seatbelts for retro-fitting to older tractors. It may be useful to include various university engineering schools as part of the project team.'
3. WorkSafe's publication 'Safe use of tractors with attachments' provides salient information about the importance of seatbelts. It notes that 'tractors are often used in terrain where rocks, stumps, holes, ditches, embankments, depressions and crumbling or slippery banks exist, increasing the risk to the operator of being ejected from the tractor. Seatbelts on tractors can save lives by preventing operators being ejected from the tractor seat. Where there is a risk of a roll over, the seatbelt keeps the operator within the protected ROPS area and prevents the operator from being thrown in front of the wheel or implements. Where there is a risk of the operator being ejected, a seatbelt must be worn. If the tractor does not have a seatbelt, it is recommended that a seatbelt is fitted where reasonably practicable.' In addition, the publication advises that 'many older tractors are not fitted with seatbelts or may not have provision to fit a seatbelt. There are commercial products available for older tractors that provide for the installation of seatbelts.' I commend WorkSafe's publication.

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[5] COR 2004 0731

FINDINGS

The investigation has indicated that Mr Rigano was in relatively good health at the time of his death, and was a very experienced farmer. I note that no mechanical faults have been identified in the tractor, which may have contributed to the incident. In the circumstances, I find that Mr Rigano was inexplicably traversing steep terrain in the tractor, without wearing a seatbelt, and these were the main contributing factors to the injuries he ultimately sustained.

I accept and adopt the medical cause of death as identified by Dr Heinrich Bouwer and find that Dominic Rigano died from injuries sustained in a tractor incident as a driver.

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:

Mr Andrew Rigano
Mr David Steer, Victorian WorkCover Authority (WorkSafe Victoria)
Leading Senior Constable Gary Slink

Signature:

AUDREY JAMIESON
CORONER
Date: **6 December 2016**