NORTHERN TERRITORY OF AUSTRALIA

CORONERS ACT 1993

Rel No: D0192/2017 Promis No: 8303780

Section 16 Coroner's Reasons for Decision not to Hold Inquest Section 34 Coroner's Findings

1. I, Kelvin Currie, the undersigned, Deputy Coroner for the Northern Territory, have investigated the death of:

JULIE FRANCES MORRELL

- On: 26 October 2017
- At: Humpty Doo Hotel carpark, Arnhem Highway, Humpty Doo

I have decided not to hold an inquest into that death because the investigations into the death have sufficiently disclosed the identity of the deceased person, the time, place, cause of death, relevant circumstances concerning the death and the particulars needed to register the death under the *Births, Deaths and Marriages Registration Act.*

2. I do not consider that the holding of an inquest would elicit any information further to that disclosed by the investigations conducted.

SUMMARY OF EVIDENCE

Identification

3. On 26 October 2017 the Deceased's body was identified by her employer, Ross Robertson.

Post-Mortem Examination

- 4. An external examination was performed by Doctor John Rutherford, Forensic Pathologist on 27 October 2017. His report of 1 November 2017 gives the cause of death as:
 - 1(a) Disease or condition leading directly to death: *Mechanical (traumatic) asphyxia*

In his report, Dr Rutherford comments:

Summary of Main Pathological Findings

- Intense facial, neck and upper chest suffusion incorporating petechial haemorrhages of the skin and conjunctivae.
- Blockage of the nostrils by grit and dust.
- Abrasions of the front and right side of the chest/upper abdomen with some parchmented imprint damage over the right lumber region.
- Palpable evidence of right lateral rib fracture.
- Parchmented abrasion (extensive) over the left upper limb.
- An abrasion on the right knee.

Conclusions

• The pattern of the injuries as observed externally are commensurate with mechanical ("crush") asphyxia.

Opinion to medical cause of death

• Consistent with mechanical (traumatic) asphyxia.

Specimens

5. Specimens were taken for toxicological analysis.

Results: Forensic Science Case Number: 1705997

Not detected: Alcohol and other common drugs.

Police Investigation

6. A coronial investigation by Police found no suspicious circumstances surrounding this death.

Circumstances

7. The Deceased (Ms Morrell) was a 59 year old Caucasian woman born 17 June 1958 in Springvale, Victoria to Valda and James Shepherd. The family relocated to Darwin when she was two years old. She married James Morrell and they had two children, Chloe and David. At the time of her death she was in a 14 year relationship with Russell Collocott.

Ms Morrell submitted a job application to Buslink on 6 February 2017. On 13 February 2017 she was provided a "Lesson Plan" that covered familiarisation and induction. She was employed for the next eight and a half months until her death on 26 October 2017. During that time she worked 798.61 hours. Those hours were accumulated primarily by her driving as a casual school bus driver.

She was assessed on 7 March 2017, 22 March 2017, 3 April 2017, 3 May 2017 and 20 June 2017. She was regarded as a good driver and had no complaints made against her.

The buses have an interlock braking system that connects the rear brakes with the doors. In effect, when the doors are open the rear brakes are engaged. The system ensures that passengers can embark and disembark safely. Once the doors close the brakes disengage.

That leaves a vulnerability that has sought to be overcome with training. The Buslink training indicated that when the bus is stationary the handbrake must be engaged and the gear moved to "neutral" or "park".

The real danger of course is if the driver leaves the seat. The doors can be closed by reaching through the driver's window or utilising a switch situated under the bumper bar at the front of the bus.

The Buslink training indicated that the handbrake needed to be applied, the transmission put into neutral, the footbrake released, the controls turned off, the ignition cancelled, the keys removed and a recheck that the handbrake was engaged before leaving the seat.

The issue with such procedures is that there will be times when they are not followed and that has been demonstrated in other states. For instance, in Victoria a report by the Office of Transport Safety Investigations dated 3 February 2016 found that there were 50 unmanned rollaway incidents of buses since the year 2000.

In NSW from 1 January 2018 the Department of Transport, Roads and Marine Safety required that all buses being registered for the first time have an additional safety step: that after the doors close the bus will not move unless there is activation of either the brake or accelerator at 7.2 of TS-155:

"The Door Safety System shall only release the Brake Door System, if no object has been detected, after:

- The doors have fully closed; and
- The handbrake is released; and
- A secondary activation of either of the footbrake or the engine accelerator is applied."

That is just one of a number of safety improvements referred to as Technical Specification 155.

On 26 October 2017 Ms Morrell was rostered to do the school run from 7.00am to 8.45am and then a Charter Service for a Cruise Ship excursion from 8.45am to 3.00pm. The excursion was to take cruise ship passengers to the Jumping Crocodiles and then to the Humpty Doo Hotel for lunch. There were two Buslink buses working together to take the passengers on the excursion. The bus that Ms Morrell was driving was a 2017 Mercedes Benz O500R model with a Vogren Endura body.

The buses arrived at the Humpty Doo Hotel at 12.33pm. Ms Morrell parked the bus in the Hotel carpark and opened the doors. It appears that the bus was left in "drive". Ms Morrell alighted from the bus and put a step on the ground and

then assisted the passengers getting off the bus and making their way to the Hotel. The last of the passengers left the bus at 12.36pm.

Ms Morrell returned to the bus at 12.37pm apparently to collect her wallet. She left 16 seconds later. The engine of the bus was still running with the air-conditioning on. As she left she closed the doors using the switch under the bumper bar at the front of the bus. She then walked across the front of the bus heading toward the Hotel.

There was a pause as the doors closed. The bus then began to move forward quite rapidly. Ms Morrell noticed the bus moving and ran back to the front bumper. She bent down to try and open the doors (and therefore stop the bus) with her right hand. At the time she was moving backward. As the bus gathered pace she turned around and was running alongside the bus, reaching down with her right hand in a back hand position attempting to get to the switch.

She managed to hit the switch but fell forward under the front of the bus. Shortly after she fell the front of the bus hit another vehicle parked in the parking area. It pushed the vehicle forward into a chainmesh fence. The resistance provided by the other vehicle and the brakes engaging on the bus stopped the bus. Ms Morrell was left trapped face down with the right side of her torso and pelvis trapped under the left front tyre of the bus.

It was three minutes before patrons from the hotel observed the crashed bus and raised the alarm. An ambulance was called at 12.55pm. The tour guide and then the other Buslink driver attempted to remove Ms Morrell and resuscitate her but she was stuck fast under the tyre.

Ambulance Officers confirmed that she had died at 1.05pm.

An autopsy confirmed that Ms Morrell had been crushed on the right hand side of her torso fracturing at least one lower rib and leading to her dying of asphyxiation.

This was a workplace accident and WorkSafe Inspectors attended the scene and undertook an inquiry.

It is likely that Ms Morrell intended to put the handbrake on and put the bus in "neutral" after the passengers had alighted. However, in all workplaces there are moments of inattention. In this case it had a fatal outcome. The Victorian study was titled: "Human factors analysis of bus rollaways". By far the most rollaways occurred when the driver was taking a break or stopping to go to the toilet.

The evidence is that there are no Australian Standards for bus brake interlocks for the doors. There are no specifications or guidelines in the Northern Territory.

In 1997 the NSW Department of Transport Roads and Maritime Services published Technical Specification 146 for buses in NSW. The bus that Ms Morrell was driving was compliant with that specification.

As a response to the death of Ms Morrell, Buslink sought and obtained a report from Dr Shane Richardson of Delta-V Experts. His Report of 5 August 2018 is a very balanced and objective report.

In his opinion the policies and training of Buslink "are similar, if not better, than other organisations ..."

However he went on to recommend:

"...that any new buses procured by Buslink be compliant with the NSW Department of Transport Roads & Maritime Services 'Technical Specification 155' which would provide an 'Engineering Control' to support any 'Administrative Controls' created by Buslink.

The issue to retro-fit existing Buslink Buses with doors compliant with the NSW TS-155 will have to be undertaken on a Bus by Bus basis only if there is a commercially available retro-fit system."

That appears to be an entirely sensible recommendation.

I **recommend** the Department of Infrastructure, Planning and Logistics give consideration to requiring buses to incorporate the secondary failsafe system as provided in NSW by TS-155.

FINDINGS

I find that the Deceased is Julie Frances Morrell, a Caucasian female born 17 June 1958 at Springvale, Victoria. She resided at 15 Sandpiper Grove, Howard Springs and at the time of her death was a driver with Buslink.

The Deceased died at the Humpty Doo Hotel carpark, Arnhem Highway, Humpty Doo on 26 October 2017 at 1.05pm.

The cause of death was mechanical (traumatic) asphyxia as result of motor vehicle incident where she was the driver out of the vehicle at the time.

Dated 13 December 2018

Kelvin Currie Deputy Coroner