MAGISTRATES COURT TASMANIA

MAGISTRATES COURT *of* TASMANIA

CORONIAL DIVISION

Record of Investigation into Death (Without Inquest)

Coroners Act 1995
Coroners Rules 2006
Rule 11

I, Robert Webster, Coroner, having investigated the death of Pauline Catherine Marie de Wit

Find, pursuant to Section 28(1) of the *Coroners Act* 1995, that

a) The identity of the deceased is Pauline Catherine Marie de Wit (Ms de Wit);

b) Ms de Wit died in the circumstances set out in this finding;

c) Ms de Wit's cause of death was acutley decompensated congestive cardiac failure due to blunt traumatic injuries of the posterior chest wall, lungs and vertebral column sustained in a motor vehicle crash; and

d) Ms de Wit died on 20 November 2018 at Launceston, Tasmania.

1. In making these findings, I have had regard to the evidence gained in the investigation into Ms de Wit's death. That evidence includes:

- Police Report of Death for the Coroner;
- Affidavits establishing identity and life extinct;
- Affidavit of Dr Donald Ritchey, State Forensic Pathologist;
- Crash Investigation Services report of Senior Constable Michal Rybka;
- Ambulance Tasmania patient care report;
- Medical records obtained from the Newstead Medical Centre and the Launceston General Hospital;
- Affidavit of Mr Wayne Rice, transport safety and investigation officer;
- Transcript of recorded video interview with Mr Clayton Brown together with the video recording;
- Transcript of recorded video interview with Ms Jessica Rumbel together with the video recording;

- Affidavit of Ms Christine Hughes;
- Affidavit of Ms Nicole Turner;
- Affidavit of Ms Jessica Andrews;
- Affidavit of Ms Madelaine Lodge;
- Affidavit of Ms Samantha Carsley;
- Affidavit of Ms Yvonne de Wit;
- Affidavit of Constable David Eaton together with his body worn camera footage;
- Affidavit of Senior Constable Steven Ockerby;
- Affidavit of Senior Constable Michal Rybka together with his scene sketch plan;
- Affidavit of First-Class Constable Nigel Housego;
- Affidavit of First-Class Constable Brett Tyson together with photographs;
- Affidavit of Senior Constable Donna Stafford together with photographs;
- Affidavit of First-Class Constable Marcus Williams together with photographs;
- Tasmania police traffic crash report;
- Tasmania police incident report prepared by Senior Sergeant Jason Jones and media release prepared by Acting Inspector Nick Clark;
- Bureau of Meteorology weather observations for Launceston, Tasmania on Tuesday, 20 November 2018;
- Crash statistics report for the southern outlet at Westbury Road prepared by Mr Donald Howatson, manager traffic safety, traffic engineering, Department of State Growth; and
- Miscellaneous documentation.

Background

2. Pauline Catherine Marie de Wit was born in Launceston on 27 May 1965. She was the oldest of four children to Wilhelmus and Cornelia de Wit. Ms de Wit was 53 years of age at the date of her death. Ms de Wit never married and had no children. She was born with a severe intellectual disability and she endured marked scoliosis, bilateral osteoarthritis to the knees and her records note she received regular podiatric treatment from at least 2011. Ms de Wit required fulltime personal care and this was provided principally by her mother, with the assistance of her father and sister,

Yvonne de Wit, until she was about 40 years of age. Thereafter she resided at Esk Banks at Eskleigh House at Perth before she moved to another Eskleigh home in Longford in or about 2013. Yvonne de Wit was appointed by the Guardianship and Administration Board as Ms de Wit's administrator for three years on 1 June 2018.

3. In September 2018, Ms de Wit was admitted to the Launceston General Hospital following a fall and was found to be in rapid atrial fibrillation with fluid overload. She was also found to have pneumonia. Ms de Wit was treated for approximately two weeks before being transferred to the John L Grove rehabilitation centre. This followed a review by a physiotherapist who determined her mobility might be improved with rehabilitation. She was just discharged from rehabilitation at the end of October to Eskleigh House because she was restricted to a wheelchair and this was Eskleigh's only facility which could accommodate this.

The motor vehicle crash

4. At around 8.15am on Tuesday 20 November 2018, Ms de Wit was a rear compartment passenger in a white Toyota disability taxi, registered number C06KN (the disability taxi) when that vehicle was involved in a five vehicle collision. Ms de Wit had left the Eskleigh Nursing Home and was travelling to a doctor's appointment at the Newstead Medical Practice. Also travelling in that vehicle was Madelaine Lodge who, at that time, was Ms de Wit's carer. The disability taxi was being driven by Jessica Rumbel. The taxi was travelling north on the Midland Highway towards Launceston and moved from the left to the right-hand lane of traffic to allow vehicles merging onto the Midland Highway from the Bass Highway off-ramp access to the left-hand lane of the Midland Highway.

5. Ms Rumbel was driving at or below the speed limit of 110km/h and drove in behind a blue Land Rover wagon registration number F18KR (the Landrover) driven by Jessica Andrews. Her son and daughter were passengers in that vehicle. In front of Ms Andrews was a silver Volkswagen registration number D69MR (the VW) driven by Nicole Turner. Her son and daughter were passengers in that vehicle. In front of Ms Turner was a white Kia hatch registration number H75JE driven by Christine Hughes (the Kia). Behind the disability taxi was a white Mazda Ute registration number E50MR (the Ute) driven by Clayton Brown. Once Ms Rumbel reached the crest before the crash site, she observed a backlog of slow-moving and stationary traffic ahead of her. She braked heavily but the front of the disability taxi collided with the rear of the Landrover which caused that vehicle to collide with the VW which in turn collided

with the Kia. The disability taxi came to a stop momentarily and it was then hit from behind by the Ute.

6. Christine Hughes, like Ms Rumbel, had moved into the right-hand lane so that merging traffic from the Bass Highway could use the left-hand lane. She says a smaller green or yellow car in front of her suddenly slowed down. Ms Hughes braked, but determined she was not slowing down fast enough, so she braked harder. She was travelling at between 100 km/h and 110 km/h prior to braking. She did not collide with the vehicle in front of her. Ms Turner says the traffic travelling down the hill into Launceston at that time was heavy and she was travelling at 100 km/h before slowing down to about 80 km/h. She recalls everyone was trying to get into the right-hand lane because there was a truck travelling slowly in the left-hand lane. As she approached the Westbury Road overpass she saw the Kia brake hard and slow down substantially. Ms Turner braked hard reducing her speed to approximately 60 km/h. She looked in her rearview mirror and saw the Landrover was about to hit her from behind. Ms Andrews says she saw the VW brake and commence to slow rapidly so she braked hard in an effort to slow down. She was driving at 90 km/h at the commencement of braking. The disability taxi collided with the rear of the Landrover which in turn collided with the VW which pushed that vehicle into the rear of the Kia.

7. Mr Brown entered the Midland Highway from the Bass Highway via the ramp and into the left-hand lane. He observed the disability taxi go past in the right-hand lane. He then merged across into that lane and followed the disability taxi because he could see the heavy traffic flow in the left-hand lane. He observed the disability taxi brake and collide with the vehicle in front of it and stop. He says he was driving at 90 km/h at that point. He braked hard but collided with the rear of the disability taxi.

8. After Mr Brown's Ute collided with the disability taxi Madelaine Lodge immediately called 000 on her mobile phone. She checked on Ms de Wit's welfare and saw her wheelchair had broken on the right-hand side and Ms de Wit was lying on the floor on her back with her feet in the wheelchair. Soon after Ms Lodge's brother, who was a few cars behind and who did not see the crash, stopped and assisted Ms Lodge lift Ms de Wit so that she could once again sit up in her wheelchair. Ms Lodge comforted Ms de Wit until paramedics arrived.

9. Ms Hughes was not injured as a result of the collision and after the accident she assisted some of the people involved. She gave her details to one of the firemen who was present and then she was permitted to leave. She says she had not consumed

alcohol or drugs prior to driving that day. Ms Turner was conveyed by ambulance with her children to the Launceston General Hospital for medical assessment and observation. She and her children were discharged with no injuries after four hours. Ms Andrews was also conveyed by ambulance with her children to the Launceston General Hospital for medical assessment and observation as a result of the crash. She suffered cuts, bruising, abrasions and a whiplash as a result of the crash. She and her children, who sustained minor injuries, were subsequently discharged. Ms Rumbel, Ms Lodge and Mr Brown were not injured in the crash. Ms de Wit was conveyed to the Launceston General Hospital after initially presenting in a stable condition. However, she subsequently deteriorated and died later that day.

Accident investigation

10. Police from Northern Road and Public Order Services attended the scene of the crash, and given the incident appeared to be a minor one, details from each of the drivers was obtained in order to complete the traffic crash report. All drivers apart from Ms Hughes were breath tested at the scene and returned negative results. The vehicles were then towed from the scene which was cleared of debris. Subsequently police were informed of the unexpected death of Ms de Wit. Senior Constable Rybka was tasked with this investigation. He arrived at 1.10pm on 20 November 2018 and carried out an inspection of the crash site with the assistance of Senior Constable Ockerby who had attended the scene just after the accident had occurred. The weather was fine and the road surface was dry. The section of highway at the crash site had a designated speed limit of 110 km/h. The 110 km/h speed limit sign was located 150 metres south of the Westbury Road overpass for northbound motorists on the western grass verge. The ramp for traffic leaving the Bass Highway and entering the Midland Highway is approximately 200 metres further south of the Westbury Road overpass.

11. Due to the topography of the roadway, there is an uninterrupted view for motorists travelling north for at least 200 metres prior to the crash site. Where the ramp from the Bass Highway joins the Midland Highway there is an electronic advisory sign warning motorists travelling north on the Midland Highway and also entering from the Bass Highway of slow-moving traffic at peak times. This sign was not working at the time of the collision and it was being repaired at the time of Senior Constable Rybka's attendance. From his inspection, Senior Constable Rybka prepared a hand-drawn sketch scene plan while Constable Tyson attended and took photographs. Further enquiries revealed all drivers were appropriately licensed and that neither Ms Rumbel

nor Mr Brown were using their mobile phones at the time of the crash. Given the evidence with respect to the manner of the driving of Ms Hughes, Ms Turner and Ms Andrews I find none of them were using their mobile phones at the time of the crash.

12. Subsequently, First-Class Constable Housego visually inspected the white Kia and that inspection revealed no obvious faults or failures that could have caused or contributed to the collision. Senior Constable Rybka performed a visual inspection of the VW and the Landrover and those inspections revealed no obvious faults or failures that could have caused or contributed to the collision. Both the disability taxi and the Ute were mechanically inspected by Mr Wayne Rice. The disability taxi had two minor defects which rendered it unroadworthy. However, Mr Rice says neither of those defects caused or contributed to the crash. Mr Rice says the Ute was roadworthy and he says his inspection did not reveal any issues with that vehicle that would have caused or contributed to this crash. I accept Mr Rice's opinions.

13. Senior Constable Rybka's investigations revealed that all the occupants of the disability taxi were wearing their respective seatbelts. The position for the wheelchair in that vehicle was fitted with a lap seatbelt only. The wheelchair was secured to the floor of the vehicle using a 'Qstraint' inertia reel system which used 4 anchor points - two at the front and two at the rear. The system uses quick release levers at all four anchor points. The restraints are fixed onto the wheelchair at designated anchor points on the chair at an angle of approximately fourty-five degrees to the floor. The retraction and release functions on all four belts were tested by Mr Rice and no issues were found. The Australian standard on the restraint system could not be identified from the system itself due to worn identification tags. However, further research confirmed this system complied with the Australian standard. The two rear restraints were utilised as anchor points for the lap seatbelt which Ms de Wit was wearing. The wheelchair also complied with the relevant Australian standard with respect to using wheelchairs as a seat in a motor vehicle.

14. This standard is only a recommendation for transporting people using wheelchairs and not a legal requirement. When inspected the wheelchair had collapsed due to a broken push handle on the right-hand side. The right-hand cross brace support bracket was also broken. As both those components failed the entire left side of the chair folded outwards and collapsed. Senior Constable Rybka says the first frontal impact of the disability taxi with the Landrover propelled Ms de Wit forwards and she was restrained by the lap belt in combination with the wheelchair being secured to the floor. The second impact between the Ute and the disability taxi resulted in the rear

of the chair being thrust against her body, which in turn caused the frame components to fail and the wheelchair to collapse rearwards. Senior Constable Rybka is qualified to provide this opinion and I accept it.

15. The Department of State Growth has specified, in a document dated August 2017 and titled *Vehicles for People with Disabilities*, the requirements for vehicle modifications which carry passengers. They are as follows:

- Some passengers may require the vehicle to be modified for them to be transported in the vehicle;
- Examples may include wheelchair spaces requiring the removal or modification of existing seats, modified doors to accommodate the fitment of hoists or ramps. These and other modifications to the vehicle, roof, floor, suspension et cetera are required to be certified by an AVC;
- Wheelchair occupant restraint systems can provide protection in most crashes if they are correctly installed and adjusted for the occupant. In general wheelchairs are not well suited to the requirements for vehicle seating and the occupants are, where possible, better seated in the factory fitted seats, wearing the approved seatbelts. All wheelchairs are required to be restrained securely;
- Wheelchair restraints and wheelchair occupant restraints must be designed, constructed, and installed in accordance with the requirements of the Australian Standards AS/NZS 10542.1, this also includes the space required for the occupied wheelchair;
- Vehicle mounted ramps and hoists must be designed, constructed and installed in accordance with the requirements of Australian Standards AS 3856 parts 1 and 2;
- Where an additional or modified door has been fitted it must be compliant with Australian Design Rule (ADR) 29 for strength and ADR 2 for door latches and hinges; and
- The location of a hoist or ramps should not block any fitted emergency exit, alternate emergency exits may need to be fitted and require AVC certification.

16. Mr Rice says the wheelchair restraint system fitted to the disability taxi, in this case, complied with these requirements.

17. Samantha Carsley says just prior to this crash she entered the left-hand lane of the Midland Highway from the ramp for traffic leaving the Bass Highway well below the 110 km/h speed limit. Traffic in the right-hand lane was overtaking traffic in the left-hand lane and was continuous and this prevented her from merging into the right-hand lane. She says a vehicle a few cars ahead of her in the left-hand lane crossed from that lane into the right-hand lane. After which she saw a series of cars in the right-hand lane braking. She then heard the screeching of tyres and the sound of a number of collisions. The vehicle which Ms Carsley saw moving from the left-hand lane to the right-hand lane is the vehicle which caused Ms Hughes to brake hard which in turn caused the other drivers involved in this crash to brake in the manner described above. A media release was issued and inquiries were conducted to identify the driver of that vehicle but police were unsuccessful in identifying that driver.

18. No criminal charges were, after advice was sought and obtained from the Office of the Director of Public Prosecutions, preferred against any of the drivers involved in this crash.

19. Mr Donald Howatson has supplied information relating to the number of crashes for the section of the Midland Highway between the Bass Highway intersection and the Howick Street intersection in the previous five years. The crashes are fairly evenly split both directions; that is, north and south. Crashes are also dispersed throughout the day however there is a concentrated number of crashes or a '*hotspot*' in the same area where this crash occurred in peak times between 6.15am to 9.00am on Monday to Friday. There are a similar number of crashes in the southbound lanes in the corresponding peak afternoon time between 3.00pm and 6.00pm on Monday to Friday. Since this accident, the Department of State Growth has reduced the speed limit from 110 km/h to 90 km/h for traffic travelling both north and south in the vicinity of this crash site. The speed limit on the ramp for traffic leaving the Bass Highway and entering the Midland Highway is also 90 km/h.

20. At the time Senior Constable Rybka prepared his report in this matter the reduction of the speed limit from 110 km/h to 90 km/h was being planned. Due to the road topography, there is only approximately 150 metres for motorists travelling north on the Midland Highway between a crest on that highway and the ramp for traffic merging from the Bass Highway onto the Midland Highway. There is a significant

downhill gradient at this location of 7.2%. Senior Constable Rybka calculated that vehicles travelling at a speed of 110 km/h require approximately 158 metres to decelerate and stop safely without skidding. A reduction in speed to 90 km/h still required a safe stopping distance of approximately 121 metres whereas a reduction of the speed limit to 80 km/h reduced the stopping distance for vehicles to approximately 101 metres. Given Senior Constable Rybka's qualifications and his work in the crash investigation section of Tasmania police since 2005, I accept his calculations.

Post mortem examination

21. The State Forensic Pathologist, Dr Ritchey, performed a post-mortem examination on 21 November 2018. Dr Ritchey noted Ms de Wit was seated in a wheelchair in the back of a minivan that struck a vehicle in front at high-speed after which the minivan was struck by a vehicle from behind. During the crash Ms de Wit was thrown from the wheelchair and thought to have impacted her head. Ambulance personnel arrived and found her seated in her wheelchair awake, alert, orientated and calm. She was transported by ambulance to the Launceston General Hospital where during evaluation she became agitated and hypoxic. Her clinical condition deteriorated rapidly requiring intubation. Two chest drains were inserted. However, despite aggressive resuscitation efforts, she developed cardiac arrest with pulseless electrical activity and ventricular tachycardia. Ms de Wit required advanced cardiac life support after which a broad complex tachyarrhythmia with cardiac output was achieved. She was transferred to the intensive care unit where she required escalating doses of inotropes in the face of progressive severe hypotension. In discussions with family, a palliative approach was adopted and Mr de Wit died several hours after admission to hospital.

22. The autopsy revealed both severe intellectual impairment and a marked scoliosis consistent with a history of severe physical impairment. Blunt traumatic injuries were found in the posterior chest wall and included a large volume posterior mediastinal haematoma surrounding a significant fracture of the T5/6 vetebral column. The underlying thoracic spinal cord was uninjured. There was bruising to the posterior aspects of both upper lungs and there was extensive bruising of the chest wall adjacent to the vertebral column. There was marked acute congestion and oedema of the bilateral lungs.

23. Dr Ritchey says these findings suggest Ms de Wit *"has succumbed to acutely decompensated congestive cardiac failure due to traumatic injuries of the posterior chest wall, lungs and vertebral column."* He goes on to say *"[i]ndividuals with severe congestive heart failure (chronic pump failure) are at increased risk of acutely decompensated heart failure due to a wide variety of physical challenges; in the present case traumatic injuries of the chest caused sufficient strain on the heart that it could no longer adequately function as a pump resulting in death by a* mechanism *of cardiogenic shock."*

Comments and Recommendations

24. This crash occurred in very heavy traffic during peak hour when the prevailing speed limit was 110 km/h and much of that traffic was travelling at a much slower speed. In addition the crash occurred north of a crest and on the lengthy descent into Launceston. The driver of an unidentified vehicle changed lanes when it was unsafe to do so which caused the five drivers in this crash to brake suddenly. It is clear from Senior Constable Rybka's calculations the 110 km/h speed limit should be reduced. It has been reduced to 90 km/h but is that sufficient? Ms Hughes and Ms Turner were able to slow their vehicles to avoid a collision with vehicles in front of them. Ms Andrews and Mr Brown were driving at 90km/h prior to braking. Ms Rumbel was driving in excess of that speed. Those facts and Senior Constable Rybka's calculations of the stopping distance for vehicles travelling at 90 km/h result in the conclusion that the reduction of the speed limit to 90 km/h is not sufficient.

25. Therefore, I **recommend** a reduction in the speed limit to 70 km/h but in peak traffic times only; ie between 6.15am to 9.00am on Monday to Friday. This can be achieved by erecting variable speed signs which would be installed on the Midland Highway between the Kings Meadows interchange, for northbound lanes, to the intersection of that highway with Howick Street. The signs should have an option to further reduce the speed limit, down to as low as 40 km/h, in the event of inclement weather or other changes to road circumstances such as a motor vehicle accident. Because of similar crash numbers in the south bound lanes during peak traffic times these signs should also be erected in those lanes and the speed limit reduced to 70 km/h between 3.00pm and 6.00pm on Monday to Friday. Variable speed signs already operate in this State on the eastern and western approaches to the Tasman Bridge in Hobart. They operate during peak traffic times and also in poor weather conditions. At that location the prevailing speed limit is 70 km/h. In this case I am recommending a reduction to that speed during the peak traffic times referred to above only.

26. In addition, I **recommend** a reduction in the speed limit to 70 km/h for traffic on the Bass Highway which merges via the ramp onto the Midland Highway.

27. Finally, I **recommend** the Department of State Growth reviews its requirements for vehicle modifications which carry passengers with disabilities. What the investigation into this matter has shown is Ms de Wit was restrained in the disability taxi in accordance with those requirements. Those requirements rely on the integrity of the structure of the wheelchair to provide support from behind in the event of a rear end collision. Self-evidently wheelchairs are not engineered to sustain such impacts and therefore the frame failed on this occasion. In addition wheel chairs generally have no head or neck support. Consideration needs to be given to developing a system which provides some support and or protection behind a wheelchair passenger in order to prevent an incident like this occurring in the future.

Acknowledgements

28. I extend my appreciation to investigating officer Senior Constable Rybka for his very thorough investigation and report.

29. I convey my sincere condolences to the family and loved ones of Pauline Catherine Marie de Wit.

Dated: 21 January 2022 at Hobart Coroners Court in the State of Tasmania.

Robert Webster
Coroner