IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2011/4554

FINDING INTO DEATH WITH INQUEST

Form 37 Rule 60(1)
*Section 67 of the **Coroners Act 2008***

Inquest into the Death of: DENNIS ANDERSON

Delivered On:	21 June 2013
Delivered At:	Coroners Court of Victoria Level 11, 222 Exhibition Street Melbourne Victoria
Hearing Date:	27 May 2013
Findings of:	CORONER K. M. W. PARKINSON
Police Coronial Support Unit Assisting the Coroner	Sergeant Sharon Wade

I, K. M. W. PARKINSON, Coroner having investigated the death of **DENNIS ANDERSON**
AND having held an inquest in relation to this death on 27 May 2013
AT MELBOURNE
find that the identity of the deceased was **DENNIS CRAIG ANDERSON**
born on 21 October 1964
and that the death occurred on 3 December 2011
at Royal Beach, Esplanade, Mornington

from:

1 (a) Unascertained (natural causes)

in the following circumstances:

1. An inquest was held into the death of Mr Dennis Anderson on 27 May 2013. After hearing a summary read, the following witnesses gave evidence at the inquest: the investigating member, Leading Senior Constable (LSC) J Morrison of Victoria Police Search and Rescue Squad, and Forensic Pathologist Dr M Burke, employed by Victorian Institute of Forensic Medicine.

BACKGROUND AND CIRCUMSTANCES

2. Mr Dennis Anderson was a 47 year old bricklayer, who was a novice scuba diver, having commenced diving in August 2011. He had completed 19 dives. Mr Anderson regularly consumed alcohol and was a moderate cigarette smoker. He occasionally used cannabis.

3. It would appear from the medical records of General Practitioner, Dr J Roth, that he was generally healthy for his age, and had a minimal past medical history, except for a work-related shoulder injury treated between 2001 and 2005. His only other attendance was to complete a diving medical.

4. In her statement, his wife described him as active, interested in outdoor activities and in good general health. She stated that there had been an incident some 7 months before his death when he complained of chest pain, turned white, and she observed one of his legs to be in spasm. The incident lasted about 5 minutes. An ambulance was called and then cancelled as Mr Anderson recovered. Ms Anderson was unsure whether he saw a doctor in relation to this

event. It does not appear that he reported the incident to his GP. Ms Anderson also reported to the investigating member that he would complain of chest pain when anxious or physically overstressed.

5. On 3 December 2011, Dennis had arranged to dive at Royal Beach Mornington with a friend with whom he had previously dived, however when his friend was unable to join him, he asked his wife to accompany him and keep watch from shore.

6. Mr Anderson entered the water at approximately 9.41 a.m. in full wet suit and with tank and gear. He told Ms Anderson that he was intending to be about one hour. She remained on the beach and in the vicinity. At approximately 10.33 a.m., Ms Anderson saw him swimming on his back and he appeared to be in trouble. She inquired if he was OK and he responded "no". He was in 4 metres of water near rocks, and Ms Anderson called out for help.

7. A passerby, Mr Mark Collins also responded and called 000 while Ms Anderson waded out into the water. She described Mr Anderson as blue in colour, non-responsive and not breathing. She commenced CPR in the water with the assistance of another passerby, Ms Debbie Allum. Mr Collins entered the water and assisted in CPR. They then managed to drag him through the water, over some rocks and onto the beach where paramedics and police were waiting. CPR was continued by paramedics however after 30 minutes of resuscitation, attempts were ceased as Mr Anderson was deceased at the scene.

8. The evidence is that Mr Anderson was towing a bag with approximately 17 kilograms of abalone attached to his buoyancy control device and that when examined at the scene the BCD was not inflated. The evidence is that the weight being carried or dragged by Mr Anderson, together with the weights carried in the BCD resulted in his achieving negative buoyancy and that the weight exceeded the BCD capability.

9. LSC Morrison evidence was that Mr Anderson was negatively buoyant and carrying some 29.18 kg of weight during the hour diving (about 12 kg over the 17.2 kg of lift his buoyancy compensator provided when fully inflated). When he surfaced he had 5 BAR only of air remaining.

10. His evidence was that this, together with inexperience and the design of the clip attaching the abalone bag, would have resulted in Mr Anderson having to struggle to surface and remain at the surface.

FORENSIC PATHOLOGIST EXAMINATION AND EVIDENCE

11. A post mortem examination was undertaken by Dr M Burke, a Forensic Pathologist with Victorian Institute of Forensic Medicine, who provided a report to the Coroner, and gave evidence at the inquest. Dr Burke noted that that his examination was largely unremarkable. Tissue samples were sent for histology, which revealed no organic heart issues. Gas within the capillary system was considered a post-mortem phenomenon. A Toxicology report noted cannabis consistent with recent use.

12. Dr Burke stated that the cause of death was unascertained, and commented that he had no injuries and no evidence of organic heart or other disease or issues to account for his death. His conclusion was expressed as follows:

> "Taking all features of the death of Mr. Anderson into account, it would appear he has suffered a sudden natural event, probably cardiac in nature leading to a sudden cardiac arrhythmia and his subsequent death."

13. In evidence, Dr Burke confirmed his findings and opinion, and that there was no evidence of a preceding cardiac event or problem. There was no scarring, which may be an indication of a loss of oxygen, or blocked arteries significant enough to be causal in the death. As coronary artery disease (CAD) is the most common cause of death, in the vicinity of 90%, he stated that a sudden arrhythmia from CAD without any precursor was the most likely cause of death in the absence of any other explanation.

14. Dr Burke was asked to comment upon the evidence of investigating member as to the weight being carried by Mr Anderson. Dr Burke agreed this would have been likely to add to or cause a degree of cardiac stress.

15. Forensic Radiologist, Dr Christopher O'Donnell commented that there were "signs suggestive of drowning with considerable interstitial fluid in the lungs as well as fluid levels in the upper airways and sinuses", despite no radiological findings specific for drowning.

16. Dr Burke commented that these are very non-specific findings and he would expect similar findings for anyone diving or dying in water and that he could not conclude that death was caused by drowning.

EVIDENCE AS TO EQUIPMENT AND CIRCUMSTANCES OF THE DIVE

17. LSC Morrison has extensive experience as a commercially qualified and accredited diver and search and rescue operative with the Victoria Police Search and Rescue Squad. LSC Morrison provided a detailed statement to the Coroner, including the results of examination and functional testing conducted on the diving equipment recovered from the scene. He confirmed that Mr Anderson's equipment was of good standard, fully functional and in well maintained condition.

18. LSC Morrison examined the dive computer which revealed that Mr Anderson had commenced the dive at 9.41am. The dive had been for 46 minute. The maximum depth of the dive was 5.3 metres and the water temperature was 16 degrees. He examined the pressure gauge which showed there was only 5 bar of air left in his cylinder.

19. His dive logs revealed that he had previously dived at the same beach several times but with neutral weighting (buoyancy) and using considerably less oxygen from his tank in similar conditions (50-75 out of 200 BAR compared with 5 BAR left on 3 December).

20. LSC Morrison attributed this use of almost all his air to the excessive physical workload while diving. He stated that the effect of the excess weight would have been insidious and created a stressed environment which reduced Mr Anderson's capacity to react to the situation, affected his ability to think clearly, and created confusion and panic, and that he would have definitely worked very hard to get to the surface.

21. LSC Morrison noted that it was difficult to remove under load the belt clip to which his 17.5 kg abalone catch was attached, especially in the water, and that, although Mr Anderson

probably had training in doing so, he lacked the experience to identify that he was in difficulty and when he needed to remove weight.

22. When addressing whether Mr Anderson may have survived the incident with a dive buddy, LSC Morrison considered that it may have facilitated earlier notification of the emergency and assistance in weight removal.

23. Air samples were examined by the Australian Government National Measurement institute and reported to meet the Australian standard AS2299:1:2007. There was no evidence of any impurity of the air or any malfunction of equipment including tank, BCD, first or second stage air or regulator.

FACTORS CAUSING AND CONTRIBUTING TO DEATH

24. It is apparent from the evidence that all possible rescue and resuscitation efforts were made, including early commencement of CPR by Ms Anderson and his removal from the water, and a very quick ambulance response time.

25. The weight of evidence satisfies me that there was no equipment failure which may have caused or contributed to death. I am satisfied that a combination of factors is likely to have contributed. These include the strenuous nature of scuba diving, the excessive weight being carried during the dive, the likely effect of this weight on ability to respond promptly and capably to the physical and mental stresses it was causing and the failure or inability to identify the need to release weight.

26. It is possible that the presence of a dive buddy may have provided earlier identification of Mr Anderson being under stress or earlier assistance to remove weight and surface with less physical stress.

27. I find that Mr Dennis Anderson died on 3 December 2011 and that the cause of his death was unascertained natural causes, probably cardiac in nature, occurring in courses of scuba diving activity.

COMMENTS

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

28. The tragic death of Mr Dennis Anderson raises the importance of recreational divers being medically fit to dive, well trained and practising their diving skills in the safest possible manner as they gain greater experience.

29. The evidence is that whilst Mr Anderson was generally a careful diver, with good equipment and who carefully logged his dives whilst progressing his experience, the investigating member's statement highlighted the causal dive factors at play in this case, namely "diving without a buddy and failing to jettison excessive weight during a dive emergency".

30. These basic safety measures require constant reinforcement to divers at all levels, especially novice and inexperienced divers.

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

The Family of Mr Anderson;
The Investigating Member

Signature:

CORONER K. M. W. PARKINSON
Date: 21 June 2013