IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2015 1006

## FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 60(2)
Section 67 of the **Coroners Act 2008** 

I, PETER WHITE, Coroner having investigated the death of ELI IAN MARNOCK without holding an inquest:
find that the identity of the deceased was ELI IAN MARNOCK
born on 9 January 2013
and the death occurred on 28 February 2015
at 7-9 View Road, The Patch, Victoria
from:

## 1 (a) MECHANICAL ASPHYXIA

Pursuant to section 67(1) of the **Coroners Act 2008**, there is a public interest to be served in making findings with respect to **the following circumstances**:

- 1. Eli Ian Marnock was 2 years of age at the time of his death. He resided in The Patch, with his parents, Stefan Marnock and Suzanne Surridge, and siblings, Jackie and Nicola. Eli's grandparents, Russell Surridge and the late Thelma Surridge, and his uncle, Mark Surridge, also lived in the house.
- 2. Eli and his immediate family resided in the downstairs area at the front of the house, whilst his grandparents and uncle resided upstairs, in the rear of the residence. The house itself, was a three storey structure that was made from timber and fibro cladding. It had five bedrooms and three living areas.
- 3. On 28 February 2015, the entire family, with the exception of Jackie, were at home. Mr Marnock's son from a previous relationship, Jessie, was also at the residence. The family had originally planned to attend the Knox Festival fireworks, however, decided not to go, due to the unpredictability of the weather that evening.
- 4. At approximately 7:00pm, Eli was placed in his cot in the bedroom situated on the lower floor, at the front of the house.

- 5. At approximately 8:54pm, a storm hit the Ferny Creek area. Emergency services were inundated with calls from police communications to attend incidents involving fallen trees and traffic incidents as a result of the storm. The Bureau of Meteorology identified that the wind speed at this time was 21km/hr, with a wind gust speed of 39km/hr. As the wind started to pick up, the power flickered throughout the house. Mr Marnock located torches whilst Mr Surridge went upstairs to close the curtains in his bedroom. Mr Marnock proceeded to the front door to check on Mr Surridge's welfare. It was at this time that he felt the house rumbling; then shaking in its entirety. Mr Marnock was then knocked to his knees upon the ceiling collapsing. Ms Surridge was next to him at the time. The couple did not sustain any injuries. They started to look for their children.
- 6. Nicola was located sitting on a chair in the lounge room. She was pinned down by a beam from the roof lying across her chest. Mr Marnock attempted to lift the beam off Nicola. He was unable to do so. He then instructed Ms Surridge to get the hi-lift jack from the car, in an attempt to use it to lift the beam off Nicola. Upon following Mr Marnock's direction, Ms Surridge observed that she was unable to get to the car, as the carport had also collapsed. It was at this time that she discovered that a tree had fallen onto the house.
- 7. Between 8:54pm and 9:00pm, the greatest wind speed of the storm was 21km/hr, with the greatest wind gust speed being 44 km/hr.<sup>3</sup> According to the Bureau of Meteorology's Beaufort Wind Scale,<sup>4</sup> the wind gust speed equated to the Beaufort Scale Number of 6 with the descriptive term of 'strong winds'.<sup>5</sup>
- 8. At 9:00pm, it started to rain. According to the Bureau of Meteorology, the rain fall measured 0.2mm.<sup>6</sup>
- 9. At 9:01pm, upon returning to the house, Ms Surridge called '000', whilst Mr Marnock instructed an unscathed Jessie, to run up the street to seek assistance from the neighbours. It was at this time that Mr Marnock discovered that Mr Surridge was unhurt, however, trapped in his bedroom upstairs. Ms Surridge remained with Nicola in the lounge room whilst Mr Marnock went searching for Eli. By this stage an off duty police member who is also a volunteer Country Fire Association ("CFA") member, along with two other CFA members arrived at the scene. Their arrival was in response to being alerted of the incident via their CFA pagers, whilst dining together down the road. Two of the volunteers proceeded to assist Mr Marnock in his search for Eli and Nicola, whilst the other volunteer aimed to isolate the property's gas flow, as it was suspected that the strong smell of gas upon their arrival, indicated that the fallen tree had caused a significant gas leak on the property.
- 10. Whilst this was occurring, members of the Victoria Police, CFA, Ambulance Victoria, State Emergency Service ("SES"), and the Melbourne Fire Brigade ("MFB") were notified of the incident by the Emergency Services Telecommunications Authority (ESTA).

<sup>&</sup>lt;sup>1</sup> Bureau of Meteorology Data Document FB2C5A69A5-4, Bureau of Meteorology, Australian Government, page 1.

<sup>&</sup>lt;sup>2</sup> Bureau of Meteorology Data Document FB2C5A69A5-4, Bureau of Meteorology, Australian Government, page 3.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> The Beaufort Wind Scale is an empirical measure that relates to wind speed to observed conditions at sea or land.

<sup>&</sup>lt;sup>5</sup> Bureau of Meteorology Data Document FB2C5A69A5-4, Bureau of Meteorology, Australian Government, page 13.

<sup>&</sup>lt;sup>6</sup> Bureau of Meteorology Data Document FB2C5A69A5-4, Bureau of Meteorology, Australian Government, page 3.

- 11. At 9:08pm, members of Monbulk Rescue responded to the notification. They were provided with additional information from VicFire (ESTA Dispatch Centre) that two children were trapped in the house.
- 12. At 9:11pm, CFA's Operations Officer, Dom Tomkins, was alerted of the incident. He made his way to the scene.
- 13. At 9:30pm, the rainfall had increased to 2.0mm.<sup>7</sup>
- 14. At 9:32pm, Ambulance Victoria members ("the paramedics") arrived at the scene.
- 15. At 9:35pm, Victoria Police members arrived at the scene. Members from the CFA and a SES unit were also in attendance.
- 16. At 9:38pm, the MFB Fire Service Communication Control advised the MFB's District Operations Commander of the incident; requesting that Urban Search and Rescue ("USAR") support be deployed to the scene.
- 17. At 9:47pm, Mr Tomkins arrived at the scene.
- 18. At 9:48pm, it was confirmed that members from Victoria Police, Ambulance Victoria, Victoria SES, and CFA from Kallista, Monbulk Pumper, Monbulk Rescue, Monbulk Tanker, Sassafras and Silvan were in attendance. Whilst members from CFA Ranges Group Forward Operations Vehicle, Upwey Lighting, MFB Commander and USAR POD, and Utilities Companies, were enroute.
- 19. At 9:50pm, a multi-agency Emergency Management Team (EMT) meeting was organised to establish who was going to coordinate the rescue effort. It was agreed upon that Mr Tomkins would assume the in-charge role.
- 20. While this was occurring, Nicola was rescued from the house. She was assessed by the paramedics and then transferred to the Royal Children's Hospital. She was accompanied by her mother and grandmother.
- 21. At 9:57pm, it was established that all family members had been rescued, with the exception of Mr Surridge and Eli.
- 22. At 10:00pm, the rain began to fall harder; being recorded at 4.2mm.8
- 23. At 10:09pm, Mr Surridge was successfully rescued. He was then assessed by the paramedics.
- 24. At 10:19pm, the USAR Team located Eli, however, they were unable to access him.
- 25. At 10:30pm, the rain fall was noted to be 8.0mm, with the wind speed dropping to 5km/hr, and the wind gust speed dropping to 15km/hr.<sup>9</sup>
- 26. At 10:35pm, Eli was accessed by members from the MFB and CFA. The paramedics were requested to assess him. Upon doing so, they found him to be heavily trapped, and crushed under several tonnes of timber, both from tree and house infrastructure. Only small parts of

<sup>&</sup>lt;sup>7</sup> Bureau of Meteorology Data Document FB2C5A69A5-4, Bureau of Meteorology, Australian Government, page 3.

<sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Bureau of Meteorology Data Document FB2C5A69A5-4, Bureau of Meteorology, Australian Government, page 3.

Eli's body could be accessed. In spite of this, the paramedics observed that post mortem lividity was present, with Eli's injuries being incompatible with life. <sup>10</sup> Active treatment was impossible due to his position, and it was believed that he had passed away on impact of the tree.

- 27. At 10:36pm, the paramedics confirmed that Eli was deceased.
- 28. A unified CFA and MFB operation was then commenced to make the building safe for Eli's extraction.
- 29. At 11:00pm, the rain fall increased to 13.2mm, with the wind speed dropping slightly to 4km/hr, with the wind gust speed recorded as 9km/hr.<sup>11</sup>
- 30. At 11:30pm, the rain fall was recorded as 15.2mm, with the wind speed dropping further, to 2km/hr. The wind gust speed was 5km/hr. 12
- 31. At 12:00am, the MFB and CFA continued with their efforts to extract Eli from the wreckage. The rain continued to fall. It was noted to be 16.4mm. <sup>13</sup>
- 32. On 1 March 2015, at 1:10am, Eli was freed from the house. He was assessed by the paramedics in the room adjacent to the partially collapsed carport. It was confirmed that he was deceased.
- 33. At 2:08am, in the accompaniment of his father, Eli was carried by one of my representatives to an awaiting vehicle.
- 34. Forensic Pathologist, Dr Yeliena Baber of the Victorian Institute of Forensic Medicine performed a post mortem medical inspection on Eli. Dr Baber provided me with a report of her findings. The external examination was consistent with the reported circumstances.
- 35. As part of my investigation, Senior Constable Helen Bell provided me with a coronial brief of evidence ("the brief"). The brief contains statements from Eli's parents, grandfather, employees of the Yarra Ranges Shire Council, consulting arborists, an independent arborist appointed by me, the Bureau of Meteorology, a paramedic, a MFB member, a CFA member, volunteers who assisted in the initial stages of the rescue, and police members who attended the scene.
- 36. On the evidence before me, I am satisfied that Eli Ian Marnock tragically died as a result of being crushed by a tree that fell on the roof of his parents' house during a storm event, and in turn, accept the cause of death as being 1(a) *Mechanical asphyxia*.
- 37. Pursuant to section 73(1A) of the *Coroners Act 2008*, I order that this Finding be published on the internet.

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<sup>&</sup>lt;sup>10</sup> Post mortem lividity is the purple colouration of body parts, except in areas of contact pressure, appears within 30 minutes to 2 hours after death. It occurs as a result of gravitational movement of blood within the vessels.

<sup>&</sup>lt;sup>11</sup> Bureau of Meteorology Data Document FB2C5A69A5-4, Bureau of Meteorology, Australian Government, page 3.

<sup>&</sup>lt;sup>12</sup> Bureau of Meteorology Data Document FB2C5A69A5-4, Bureau of Meteorology, Australian Government, page 4.

<sup>13</sup> Ibid.

## COMMENTS

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

- 1. In light of the circumstances of this case, I sought an independent opinion from arborist, Dr Gregory Moore. Dr Moore has taught the principles and techniques of managing urban trees for over thirty years. He is widely recognised for his expertise in arboriculture, plant biology and ecology, and urban horticulture.
- 2. On 5 March 2015, Dr Moore inspected the fallen tree. He concluded that it was unlikely that anyone could have anticipated the windthrow of this tree; <sup>14</sup> stating that an ordinary person would not have foreseen it, as there were no obvious reasons to suspect the tree's stability. Dr Moore stated that because of the tree's location and apparent good condition, there would have been no obvious reason for calling an arborist to inspect the tree.
- 3. In regard to whether a trained arborist would have been able to anticipate that the tree was unstable in the ground prior to the storm event from a routine inspection of the canopy and trunk, <sup>15</sup> Dr Moore advised that it is often not possible to tell what is happening with the root system and below the ground from an inspection of the trunk and canopy. He affirmed that in this case, an arborist would have judged the foliage colour and density to be consistent with a healthy tree. Dr Moore also declared that the tree may have been stable at the time of inspection, however the damage to its roots may have occurred after the date of inspection.
- 4. Dr Moore asserted that the tree fell as a result of strong winds, and that the damage to other nearby trees suggested that the wind event initiated the windthrow of the tree, and was probably stronger than, or from a direction different to the usual wind events that the tree had previously experienced.
- 5. On 17 October 2014, in the inquest of James Robert Winchester, I made recommendations to the Yarra Ranges Shire Council ("the Council") pursuant to section 72(2) of the *Coroners Act* 2008. I advise that the Council responded to these recommendations on 5 January 2015. Some of the Council's responses to the recommendations informed that Council would henceforward supply information cards regarding tree safety and reporting risky trees to rate payers with their annual rates notices; would continue engaging with the community on the issue of tree safety with further consideration given to increased advertising through the Council's website, newsletter, telephone on-hold messaging etc. and that the Council's main *Trees and Vegetation* website page has been updated, with the top of the page concentrating on dangerous trees, with images of damaged and dangerous trees identified as examples to assist residents.
- 6. I note that inspection of trees is imperative, as the Council identified that they would respond to resident requests regarding potentially hazardous trees by having the tree

<sup>&</sup>lt;sup>14</sup> A windthrow is defined as the uprooting of a whole tree at the interface of the trunk with the soil, which may involve the lifting of roots, the snapping of roots or the failure of the trunk at the soil surface.

<sup>&</sup>lt;sup>15</sup> In forest ecology, a canopy refers to the upper layer or habitat zone of a tree. The term is sometimes used to refer to the extent of the outer layer of leaves of an individual tree or group of trees.

inspected by a qualified arborist.<sup>16</sup> The health structure of the tree and its target value (i.e. whether it would hit any construction if it fell) are assessed. The Council identified that if a tree may hit a house it would be allocated as a high target value; meaning it is considered a high priority. Whereas, if it is in an open paddock, it would be rated as a low target value; resulting in it being considered a lower priority.

7. I endorse this approach and would like to encourage those likely to be effected by such events to take advantage of the Council's initiative in this area

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

Eli Marnock's Family

Yarra Ranges Shire Council

Senior Constable Helen Bell

Signature:

**PETER WHITE** CORONER

Date: 14 July 2017

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<sup>&</sup>lt;sup>16</sup> An arborist is an individual trained in the art and science of planting, caring for, and maintaining individual trees. Arborists are knowledgeable about the needs of trees and are trained and equipped to provide proper care.