IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2019 6563

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)
*Section 67 of the **Coroners Act 2008***

Findings of:	Coroner Paresa Antoniadis Spanos
Deceased:	Gregory Roberts
Date of birth:	10 March 1982
Date of death:	30 November 2019
Cause of death:	1(a) Complications of electrocution and injuries sustained in a fall
Place of death:	Alfred Hospital, 55 Commercial Rd, Melbourne, Victoria
Keywords:	WorkSafe, electrocution, scaffolding, workplace injury, high voltage aerial powerlines

INTRODUCTION

1. On 30 November 2019, Gregory Roberts was 37 years old when he died in hospital following a workplace injury. At the time, Mr Roberts lived in Ocean Grove with his wife and their young children.

2. Mr Roberts owned and operated a building company called Redstone Building Co Pty Ltd.

THE CORONIAL INVESTIGATION

3. Mr Roberts's death was reported to the Coroner as it fell within the definition of a reportable death in the *Coroners Act 2008* (**the Act**). Reportable deaths include deaths that are unexpected, unnatural or violent, or result from accident or injury.

4. The role of a coroner is to independently investigate reportable deaths to establish, if possible, identity, medical cause of death, and surrounding circumstances. Surrounding circumstances are limited to events which are sufficiently proximate and causally related to the death. The purpose of a coronial investigation is to establish the facts, not to cast blame or determine criminal or civil liability.

5. Under the Act, coroners also have the important functions of helping to prevent deaths and promoting public health and safety and the administration of justice through the making of comments or recommendations in appropriate cases about any matter connected to the death under investigation.

6. The Victoria Police assigned an officer to be the Coroner's Investigator for the investigation of Mr Roberts's death. The Coroner's Investigator conducted inquiries on my behalf, including taking statements from witnesses – such as family, the forensic pathologist, treating clinicians and investigating officers – and submitted a coronial brief of evidence.

7. I also had access to the WorkSafe investigation brief.

8. This finding draws on the totality of the coronial investigation into Mr Roberts's death, including evidence contained in the coronial brief and the WorkSafe brief. Whilst I have reviewed all the material, I will only refer to that which is directly relevant to my findings or

necessary for narrative clarity. In the coronial jurisdiction, facts must be established on the balance of probabilities.[1]

MATTERS IN RELATION TO WHICH A FINDING MUST, IF POSSIBLE, BE MADE

Identity of the deceased

9. On 30 November 2019, Gregory Roberts, born 10 March 1982, was visually identified by his father, Ronald Roberts, who signed a formal Statement of Identification to this effect.

10. Identity is not in dispute and requires no further investigation.

Medical cause of death

11. Senior Forensic Pathologist, Dr Matthew Lynch, from the Victorian Institute of Forensic Medicine (**VIFM**), conducted an inspection on 2 December 2019 and provided a written report of his findings dated 2 December 2019.

12. The post-mortem examination revealed fractured skull, cerebral oedema, a right frontotemporal arachnoid cyst, metal in the right humerus and thoracic spine, increased lung markings, and a fractured right scapula.

13. Routine toxicological analysis of ante-mortem samples collected on 25 November 2019 detected morphine,[2] midazolam,[3] and lignocaine[4] at levels consistent with therapeutic use. No alcohol or other commonly encountered drugs or poisons were detected.

14. Dr Lynch provided an opinion that the medical cause of death was *"1(a) Complications of electrocution and injuries sustained in a fall".*

15. I accept Dr Lynch 's opinion.

[1] Subject to the principles enunciated in *Briginshaw v Briginshaw* (1938) 60 CLR 336. The effect of this and similar authorities is that coroners should not make adverse findings against, or comments about, individuals unless the evidence provides a comfortable level of satisfaction as to those matters taking into account the consequences of such findings or comments.
[2] Morphine is a narcotic analgesic used for the treatment of moderate to severe pain.
[3] Midazolam is an imidazobenzodiazepine derivative that is clinically used as a preoperative medication, antiepileptic, sedative-hypnotic and anaesthetic induction agent.
[4] Lignocaine (or Lidocaine) is a local anaesthetic often administered to patients prior to surgery or during resuscitation attempts. Lignocaine may also be used as an anti-arrhythmic drug to return the heart to a more regular beat (rhythm).

Circumstances in which the death occurred

16. At the time of the incident, Redstone Building Co Pty Ltd (**the company**) was undertaking work at 467 The Esplanade, St Leonards, on the corner of The Esplanade and Second Avenue (**the worksite**). Most of the residential building had been demolished in August and September 2019 and Mr Roberts and his team had begun the substantial renovation.

17. There were several aerial power lines that ran adjacent to the worksite, all of which were owned and operated by Powercor, including:

    (a) High Voltage: 22,000 Volt aerial lines were located adjacent to the worksite on both The Esplanade and Second Avenue including an angled span crossing the corner of the property. The span where contact was made in the eventual incident was a 7/2.5 All Aluminium conductor of 25.3m length. The High Voltage line was not insulated;

    (b) Low Voltage mains: Low Voltage Aerial Bundled Cable aerial lines were located on The Esplanade and Second Avenue under the High Voltage aerial lines. These were insulated lines and not involved in the incident; and

    (c) Low Voltage service: at the time of the incident there was a Low Voltage service cable connected at the pole on the corner of The Esplanade and Second Avenue and the house at 468 The Esplanade. This service crossed the property of 467 The Esplanade and was not involved in the incident.

18. At the worksite, Mr Roberts had been working with Michael Dixon, a carpentry subcontractor, and Todd Lang, also a carpenter who had been working for the company since April 2019.

19. According to Mr Lang, they had been building the second storey floor and frames throughout the house as well as some new ceiling joists over the existing part of the building. However, they had been unable to work on all the ceiling joists at the front, the eaves, fascia, or anything outside until scaffolding was erected.

20. In August 2019, Mr Roberts made an online application to Powercor for a balcony to be constructed near adjoining property powerlines and scaffolding. A Powercor representative subsequently attended the worksite and discussed options with Mr Roberts about how to construct scaffolding so that it would not encroach the 'No Go Zone'. The Powercor employee advised Mr Roberts that any scaffold and persons were to maintain a 500mm distance adjacent

and below the battened and insulated Low Voltage service line ('Tiger Tails' fitted).[5] The 'Tiger Tails' were installed on 28 October 2019 and a Permit to Work was subsequently issued on 6 November 2019 for the insulated Low Voltage service line. There was no Permit to Work issued for the High Voltage aerial line.

21. On 20 and 21 November 2019, Lime Scaffolding By Design Pty Ltd (**the scaffolding company**) employees attended the worksite and erected scaffolding around the house on The Esplanade side and the Second Avenue side. Both scaffolds stopped about a metre from the corner as the scaffolders had determined that if the corner scaffold was erected, it would encroach into an electrical 'No Go Zone' due to overhead powerlines. A third level of scaffolding was constructed on the ends of The Esplanade and Second Avenue sections.

22. It appears that the scaffolding company had not completed the construction of the scaffolding at this time as they were awaiting further information about overhead powerlines. Usual practice would be for a 'Scaffold Incomplete' sign or similar to be displayed at the access ladder, but the scaffolding contractors could not specifically recall hanging one and Mr Lang and Mr Dixon did not recall seeing one. Such a sign was found was found on the ground at the worksite after the incident.

23. Mr Lang and Mr Dixon recalled that the scaffolders had told them that one of the handrails or handbraces could be removed if needed. However, it is unclear whether the scaffolders told them the scaffolding was complete. Mr Lang and Mr Dixon were under the impression that it was complete. It appears that the scaffolding company advised Mr Roberts that the scaffolding was incomplete on about 21 November and a follow-up message was left for Mr Roberts on the morning of 25 November as the scaffolding company was still awaiting information about the appropriate permit from Powercor.

24. According to Mr Dixon, Mr Roberts warned the other two to be *"careful when working around the 'Tiger Tails'"*, which were covering a service wire that ran through the southeast corner of scaffolding and to the neighbouring house.

25. On 25 November 2019, Mr Roberts worked at the worksite in the morning and left at about midday.

[5] The supply line which ran overhead to supply 468 The Esplanade was a 240 volt, insulated, twisted, two core cable. The addition of Tiger Tails theoretically provided additional visual and mechanical protection as it added a further layer of insulation. However, if someone made contact with the cable and damage the insulation while the power was not isolated, there was a risk or serious injury of death.

26. Mr Dixon stated that fascia was delivered on or about that day and they had to prepare the roof rafters for fitting of the fascia and box gutters. Mr Dixon stated that the wind was *"strong and gusty and swirling. It constantly changed direction and intensity".* Mr Lang similarly recalled that it was *"fairly gusty"* that day and the *"wind was blowing in all directions and really strongly at times".*

27. Mr Roberts later returned to the worksite between 3.00pm and 3.30pm.

28. At about this time, Mr Dixon was working on the first-floor level on the southeast corner of the scaffold. Shortly thereafter, he observed Mr Roberts standing on top level of the scaffolding at the northeast corner with something in his hands. It is unknown exactly why Mr Roberts was on the scaffolding, but it has been assumed it was for the purposes of measuring for roofing materials or the fascia.

29. At about 3.30pm, Mr Dixon observed a massive flash in the area Mr Roberts had been standing above him and heard a loud bang. He then saw Mr Roberts fall backwards off the scaffold platform and onto timber joist and bearers, which were situated about two metres below.

30. Mr Lang was upstairs in the living area when he heard the arcing powerlines and felt heat on his back and face. He turned around to see electrical arcing and sparks coming from the scaffold platform and observed Mr Roberts fall backwards onto the first floor close to him.

31. Mr Lang immediately called emergency services. Mr Roberts initially regained consciousness but had trouble breathing and could not move.

32. Ambulance Victoria paramedics responded arriving at the worksite at 3.37pm. Mr Roberts was conscious but complained of pain he described as 10/10 in severity. He had sustained burns to his face, chest, back, abdomen, and arms. A second ambulance crew arrived at 3.46pm. While moving him from the first floor to the ground floor, Mr Roberts suffered a cardiac arrest and cardiopulmonary resuscitation was commenced until there was a return of spontaneous circulation.

33. Mr Roberts was transported to a local football oval where an Ambulance Victoria HEMS helicopter collected him and took him to the Alfred Hospital in Melbourne (**the Alfred**).

34. Mr Roberts arrived at the Alfred at 5.57pm where it was revealed he had sustained significant injuries including a traumatic brain injury and hypoxic brain injury, C6-7 three column

fracture with cervical cord haemorrhage, bilateral pneumothoraces, T9 vertebral fracture, skull fractures, and comminuted right scapular fracture.

35. Mr Roberts's condition continued to deteriorate, and a decision was subsequently made to remove life supports. He was kept comfortable until he passed away at 3.15pm on 30 November 2019.

WORKSAFE, ENERGY SAFE VICTORIA, AND POWERCOR INVESTIGATIONS

36. WorkSafe investigators, Energy Safe Victoria officers, and Powercor workers arrived at the worksite on the evening of 25 November 2019 and commenced their investigations into the cause of the incident.

Non-contributing observations

37. Initially it was observed that handrails, bracing, and boards were missing from the scaffolding and the ladder did not extend at least 900mm above the deck height.

38. The low voltage service wire fitted with Tiger Tails was also running through the corner of the scaffold on the southeast corner of the house, which was in breach of the Powercor Permit to Work.[6]

39. Neither of these discrepancies contributed to the electrocution incident.

The cause of the incident – Mr Roberts's contact with the High Voltage aerial line

40. Inspections revealed that Mr Roberts had been holding a Stanley FatMax metal tape measure, which made contact with the High Voltage aerial line. The 22,000 volt line was located on both The Esplanade and Second Avenue sides, including an angled span crossing the corner of the worksite. The span where contact was made was 25.3m in length.

41. As noted above, Powercor had issued a Permit to Work for a Low Voltage Service Line that crossed 467 The Esplanade and connected to 468 The Esplanade. However, Powercor had not issued a Permit to Work for the High Voltage aerial line that Mr Roberts had contacted with the metal tape measure.

42. Examination of the Stanley FatMax metal tape measure showed evidence of an electrical arcing event, including damage at both ends. The far end of the tape showed arc damage at

[6] The Permit to Work was cancelled on the morning of 26 November 2019,

approximately 0.40m, which is likely where it made contact with the High Voltage aerial line. Damage was also present at the body end of the tape with evidence of an arcing event. The location of damage is approximately 4.6m from the end of the tape measure, which is where it likely made contact with the scaffolding. The length of tape that conducted the electrical current between the aerial line and scaffold was about 4.2m, which corresponded with the distance between the aerial line and the closest point of the scaffold (4.23m). This indicated that the tape measure had been in a straight line when it made contact with the aerial line.

43. Plastic droplets on the scaffold indicated high heat damage on the scaffolding on the quick stage scaffold platform. Arcing evidence was also located on the scaffold, which was consistent with the type of contact event where the electrical current finds a path through the metal scaffold to ground to complete the circuit. Further evidence of arc flash was identified on a gate latch on the property adjacent to Second Avenue and a metal fence and building mater also adjacent to Second Avenue. This damage was consistent with a High Voltage contact event where the electrical current attempts to find a path to ground and through the earth to complete the circuit.

Compliance with the relevant regulations

44. The with *Electricity Safety (Installations) Regulation*s 2009 mandated a minimum distance of 2700mm between the scaffold and the aerial line. The measured distance between the scaffold and the aerial line at the worksite was 4230mm, which was compliant with the regulations.

45. However, the required minimum clearance distance between persons and aerial lines was 2000mm. Given Mr Roberts had made contact with the aerial line with the tape measure, his actions breached the regulations. The regulations do not make any allowances for non-intentional or inadvertent acts.

Compliance with the Energy Safe Victoria Scaffold Guideline

46. Energy Safe Victoria's guidelines for scaffolding states that 'No Go Zone' clearances should be complied with for erected scaffolding. This requires a minimum horizonal clearance of 4.6m between the scaffold and any aerial line. If the scaffold is to be built within the 'No Go Zone,' the power company needs to be contacted for a 'No Go Zone' inspection and a 'Permit to Work'.

47. The horizontal distance between the scaffold and the aerial line at the worksite was 3.3m, which was within the 4.6m 'No Go Zone'. Mr Roberts had obtained a 'No Go Zone' inspection

and Permit to Work at this location. However, it did not include any reference to the High Voltage aerial line but instead referred to the Low Voltage service cable that crossed the property and connected to 468 The Esplanade.

48. The scaffold therefore did not comply with Energy Safe Victoria scaffold guidelines.

Investigation conclusions

49. The investigations concluded Mr Roberts had been holding a metal tape measure at the time it made contact with a High Voltage aerial line. This caused an electrical short circuit and arcing event, which caused him to fall from the scaffold. Both the electrocution and the consequential fall injuries contributed to Mr Roberts' death.

50. The scaffold in place at the worksite did not comply with the Energy Safe Victoria scaffold guidelines. However, it did comply with the *Electricity Safety (Installation) Regulations 2009*. Mr Roberts's (likely inadvertent) actions had not complied with the minimum distance regulation requirements between persons and aerial lines.

WorkSafe prosecution

51. The Victorian WorkCover Authority did not commence a prosecution against Redstone Building Co Pty Ltd in relation to the fatality as it was determined not in the public interest to do so.

52. A prosecution was commenced against Lime Scaffolding By Design Pty Ltd who subsequently pleaded guilty to a single charge under sub-sections 21(1) and (2)(a) of the *Occupational Health and Safety Act 2004*. The company was sentenced (without conviction) to pay a fine of $15,000 and costs of $4,882.00.

WorkSafe blitz

53. Since 2010 there have been 9 fatalities from electrical incidents in Victoria.

54. In September and October 2020, WorkSafe inspectors conducted a targeted inspectorate blitz to raise awareness of the risk of electric shock, during construction work, of buildings or parts of buildings and associated permanent or temporary structures with builders, contractors and workers. Inspectors attended domestic and commercial construction workplaces across Victoria with checks focussed on management of electrical risks onsite.

55. WorkSafe's next actions will:

(a) continue to focus on the management of electrical risks during site inspections;

(b) seek opportunities to assist small Victorian construction businesses better understand what constitutes high risk construction work, and how to develop Safe Work Method Statements; and

(c) will look to identify opportunities to educate and drive behavioural change including how we communicate with and support industry.

56. WorkSafe is also looking into prevention strategies including higher order engineering controls. An example is GoUpSafely, which is a High Voltage Protection System that can be retrofitted to most machines that may have contact with aerial High Voltage electrical sources. When a power line is detected, active machine motions become locked-out, preventing the machine from moving closer.

57. With the increased availability, reliability, and decrease in cost, WorkSafe is considering initiatives to influence their increased use across the industry. There is also a potential opportunity for asset owners/electricity suppliers to ensure these higher order engineering controls form part of the permit to work systems. WorkSafe believes this would have a significant impact in reducing incidents.

FINDINGS AND CONCLUSION

58. Pursuant to section 67(1) of the Act I make the following findings:

(a) the identity of the deceased was Gregory Roberts, born 10 March 1982;

(b) the death occurred on 30 November 2019 at Alfred Hospital, 55 Commercial Rd, Melbourne, Victoria;

(c) Mr Robert's dies from the complications of electrocution and injuries sustained in a fall; and

(d) the death occurred in the circumstances described above.

59. On the available evidence, I am satisfied that Mr Roberts's tragic death was the result of an accident when he inadvertently touched the High Voltage aerial powerline with a metal tape

measure during the course of his employment. The subsequent electrocution and fall caused significant injuries that resulted in his death.

I convey my sincere condolences to Mr Roberts's family for their loss.

Pursuant to section 73(1A)(1B) of the Act, I order that this finding be published on the Coroners Court of Victoria website in accordance with the rules.

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

Louise Roberts, senior next of kin
WorkSafe
CGU Workers' Compensation Ltd (care of Wisewould Mahony)
Senior Constable Daniel Hughes, Victoria Police, Coroner's Investigator

Signature:

Coroner Paresa Antoniadis Spanos

Date: 22 July 2022

NOTE: Under section 83 of the ***Coroners Act 2008*** ('the Act'), a person with sufficient interest in an investigation may appeal to the Trial Division of the Supreme Court against the findings of a coroner in respect of a death after an investigation. An appeal must be made within 6 months after the day on which the determination is made, unless the Supreme Court grants leave to appeal out of time under section 86 of the Act.