IN THE MATTER OF THE HAZELWOOD MINE FIRE INQUIRY

WITNESS STATEMENT OF DAVID ANTHONY SHANAHAN

BACKGROUND

1. My name is David Anthony Shanahan. I was born on My address is Road Yinnar VIC 3869 which is approximately half way between Yinnar and Boolara, approximately 15 minutes from the Hazelwood Coal Mine (**"Mine"**).

2. I am employed by Hazelwood Power Corporation as Services Superintendent.

3. This statement is based on my own knowledge and recollection of the events, together with certain information which I have been given by other Hazelwood personnel.

4. In preparing this statement, I have had regard to GPS records from my vehicle, the time stamps on various photos and videos that I took on Sunday 9 February 2014, the commentary on a number of my videos, Dean Suares' diary notes, and copies of the Shift Notes and Mine Fire Preparedness and Mitigation Plan referred to in this statement.

5. I commenced in the Services Superintendent role at the Mine on 3 February 2014. This fire occurred in my first week on the job.

6. As Services Superintendent, my responsibilities include:

   - managing the earthworks group's operations and resourcing. The earthworks group is involved in a range of earthworks projects and activities throughout the Mine including road and drainage construction and maintenance other civil construction works;

   - the onsite plant hire contract through Delta Rent; and

   - the 1 x 7 services day operations group, who have primary responsibility within the Mine for managing operation and maintenance of the fire service and dewatering systems, patrolling for fire, and conducting wetting down and fire response.

7. As regards fire preparedness, prevention and response within the Mine, my responsibilities as Services Superintendent include:

   - overseeing the team of Mine personnel with primary responsibility for fire services (known within the Mine as the "1 x 7 crew" who work day shifts 7 days per week, and are led by Services Supervisors);

   - overseeing the earthworks group which is typically manned by employees of contractors. These personnel are able to operate a range of mobile plant such as graders, bulldozers, water carts and dump trucks, etc;

   - liaising with other managers such as Rob Dugan, Mine Manager Production, to ensure appropriate resources for the expected work load taking fire risks into account; and

- liaising with other managers in relation to fire preparedness plans prepared under the Mine's *Guidelines for Season and Period Specific Fire Preparedness and Mitigation Planning*, attached at **Annexure 1**.

8. My position within the broader management team at the Mine is depicted in the chart attached at **Annexure 2**.

9. Prior to commencing employment as Services Superintendent, I worked at the Mine for 20 years, as a Project Engineer at RTL Mining and Earthworks Pty Ltd (**"RTL"**). RTL provides contractor services to all three Latrobe Valley mines on a wide range of earthworks and infrastructure projects. Throughout this period I worked approximately 50% of the time at the Mine and the other 50% at Loy Yang Power (owned by AGL).

10. Prior to this, I worked at the Loy Yang mine itself for 7 years in a variety of roles, including Auxillary Services Superintendent. As part of this role, for part of the time, my responsibilities included overseeing the fire services crew. As is the case at Hazelwood, the fire services crew at Loy Yang were a multi-skilled gang that also had general maintenance and operations responsibilities.

11. As a result of my prior employment with RTL, I am familiar with the geography of the Mine, and with relevant infrastructure within the Mine. I was also involved in the response by the Mine to three previous large Mine fires.

12. I am familiar with the Mine's procedures as regards reporting and responding to fire.

FIRE PREPARATION

Friday, 7 February 2014

13. On Friday, 7 February 2014, I was aware of a number of media reports and weather forecasts regarding hot and windy conditions over the weekend, and particularly on Sunday, 9 February 2014. I was aware of media reports that Sunday had the potential to be the worst fire risk day since Black Saturday in 2009. The CFA had pre-issued a total fire ban for Saturday, 8 February 2014 and Sunday, 9 February 2014 on Friday, 7 February 2014.

14. I was aware that a Mine Fire Preparedness and Mitigation Plan for the Mine had been issued by Rob Dugan, Mine Manager Production, on a high risk fire day earlier in the week on 3 February 2014. A copy is attached at **Annexure 3**.

15. I checked with Rob Dugan whether he wanted me to prepare and issue a Mine Fire Preparedness and Mitigation Plan for Saturday, 8 February 2014 and Sunday, 9 February 2014. Rob said that he did, and stepped me through the process for completing the form.

16. I discussed with Rob making additional contractors available over the weekend to supplement the Mine workforce, including by conducting fire patrols. We agreed that 2 contractors from RTL should be rostered for both Saturday, 8 February 2014 and Sunday, 9 February 2014, and made related arrangements. These contractors were to each man a 30,000 litre water cart during the day shift from 7 am on both days and patrol for fire and conduct additional wetting down ("spraying"). The 30,000 litre water carts, which are supplied by Delta (which is the Mine's plant supply contractor), are kept on site during the fire season at a minimum of half full at times of high risk, in case of a fire emergency.

17. I circulated the Mine Fire Preparedness and Mitigation Plan for Saturday, 8 February 2014 and Sunday, 9 February 2014 to all Mine personnel at 12: 50pm on Friday 7 February 2014. A copy of the email together with the two attachments is at **Annexure 4**.

18. The Mine Fire Preparedness and Mitigation Plans summarised key information for Mine staff working on Saturday, 8 February 2014 and Sunday, 9 February 2014 as regards fire preparedness, resources, and response. For example, they:

    - referred to the fact that there was a total fire ban for each day;
    - outlined a range of measures to be taken to reduce fire risks – e.g. wetting down to be undertaken on exposed coal in the operating area of the Mine; and
    - set out the resources available in the event of a fire emergency, for example fire trucks (3,000 litres), water tankers (30,000 litres), furphy water carts (1000 litres)(referred to within the Mine as "furphys"), etc.

RESPONSE TO THE FIRES

Commencement of the Hernes Oak fire: Friday, 7 February 2014

19. In the afternoon of Friday, 7 February 2014, a fire commenced around Hernes Oak to the north west of the Mine.

20. Smoke from this fire was observed by myself and a range of other personnel from within the Mine. Later that afternoon, I had to go into Traralgon. However I kept in contact with Dean Suares who is the Services Supervisor of the 1 x 7 crew known as 1 x 7A, in relation to the status of the fire, and emphasised that I would return to the Mine if required.

21. In light of the Hernes Oak fire, we kept personnel from the Mine's 1 x 7 crew, and various earthworks contractors, back at the Mine. These personnel were due to finish at approximately 5:00pm and 3:30pm respectively. These personnel and water carts were stationed in the north-west part of the Mine, which is the closest part of the Mine to Hernes Oak, and patrolled for fire and monitored the situation.

22. Given the predominant wind direction, the fire was not a threat to the Mine, The fire looked to be having an impact on Yallourn.

23. I understand that the relevant personnel were positioned up in the northern part of the Mine until approximately 6 pm.

Saturday, 8 February

24. I was not rostered to work on Saturday, 8 February 2014, and did not attend the Mine.

25. However, I had not gone away to Welshpool for the weekend as I had originally planned, as I wanted to stay close to home and the Mine, due to the high risk of fire. I live on a 10 acre property between Yinnar and Boolara, approximately 15 minutes to the south west of the Mine.

26. Given the fire risks, I needed to take some steps in relation to possible risk to my own 10 acre property. I collected a fire fighting pump on the Saturday morning that I had previously lent to a friend, so that I would have it available if need be. I drove via Morwell and inspected the Hernes Oak fire from public roads that were open so I had a better understanding of potential impacts.

27. I spoke to Dean Suares who was on duty at the Mine with his 1 x 7 crew, throughout the course of the day, and he confirmed during those calls that there was no apparent active fire threat to the Mine.

28. Dean was assessing the status of the Hernes Oak fire and personnel in the 1 x 7 crew were conducting wetting down (spraying). Dean Suares' diary notes from that day are attached at **Annexure 5** and refer to "Spraying x 2".

29. For personnel working on Saturday, 8 February 2014, the fire preparedness plan that I issued on Friday, 7 February 2014 was incorporated into the Shift Notes for both Saturday, 8 February 2014 and Sunday, 9 February 2014. A copy of the Shift Notes is at **Annexure 6**.

30. Shift Notes are provided to all Operations Staff. These Shift Notes were discussed at the meetings of the 1 x 7 and operations crews which are held prior to the commencement of the day shift at the Mine. Such meetings known as "pre start briefings". Dean Suares has told me that he specifically referred to the Hernes Oak fire at the 1 x 7 crew pre start meeting which he led that day.

31. Throughout the course of the day and evening on Saturday, 8 February 2014 (and into the early hours of Sunday, 9 February 2014), wetting down of the operational levels of the Mine was conducted.

Sunday, 9 February 2014

32. On 9 February 2014, I was again not rostered on to work at the Mine. Throughout the morning Dean Suares and I spoke on several occasions in relation to the current fire conditions.

33. From my conversations with him, I know that at the 1 x 7 crew pre-start meeting at 6:45am, which Dean led, the shift notes were discussed, and personnel were advised of the total fire ban and told to by Dean be monitor the Hernes Oak fire, and to be aware of the wind change forecast for the early afternoon.

34. From 7am, RTL contractors again manned the two 30,000 litre water carts as an additional fire preparedness measure.

35. At home, I stayed outside and was monitoring for signs of smoke. I was very aware of the fire potential that day, particularly as the wind picked up from the mid-morning.

36. In the morning, I drove almost to the Mine, to a big hill behind the Hazelwood Cooling Pondage to check on any fire activity in the vicinity of the Mine. I could not see any significant fire activity.

37. Mid-morning, there was a small fire in the operating area of the Mine, caused by a mechanical fault on idler M680. The 1 x 7 crew assisted the 2 x 12 crew in extinguishing this

fire. Dean Suares' diary notes from Sunday, 9 February 2014, copy at **Annexure 7**, note that the 1 x 7 crew attended to this fire, and also record "*spraying and fire watch*" as an activity.

38. At about 11am, a major fire commenced in the Strzelecki Ranges near Yarram and Welshpool to the south east of the Mine. I saw the smoke from my property and it heightened my concerns for how the day might pan out. Given the wind direction, a north westerly, that fire was not a risk to the Mine. Although I do not recall specifically doing so, it is likely that I checked the internet at this time, to determine exactly where that fire was. I was also listening to local ABC radio so that I would hear any relevant fire alerts.

39. I spoke to Dean Suares around midday. Dean indicated that the Hernes Oak fire seemed to still be under control, and that there was no sign of the fire approaching the Mine. Shortly after this, the 1 x 7 crew stopped for lunch. Dean has informed me that prior to taking a lunch break, he overheard radio chatter between the HVP plantation workers coming through on radio channel ' within the Mine, and all of the signs at that time were that the Hernes Oak fire was under control, and that those workers were planning to meet for lunch at Thorpdale Road at approximately 12:30pm. This reinforced the view that the Hernes Oak fire was under control.

40. At just after 1:00pm whilst Dean and the 1 x 7 crew were having lunch in the tea/kitchen room in the Mine Administration building / Mine Office known to Mine personnel as the "Brew Room", the Shift Supervisor Ian Wilkinson came and alerted them that the Hernes Oak fire had flared up.

41. Dean Suares and his 1 x 7 crew travelled immediately to the northern batters in the Mine fire truck, and in vehicles with furphys. They had met the two RTL manned water carts there (who had remained in the field during the 1 x 7 crew lunch break), making in total a group of 5 – 7 in that area by approximately 1:10pm. The water carts had been patrolling the Mine above the batters, looking out for fire all morning, and had been told by Dean to focus their attentions on the north western part of the Mine given the existence of the Hernes Oak fire. The RTL water carts were at the northern batters when the 1 x 7 crew arrived. Dean had radioed them on his way up to say that they were coming and to meet them there.

42. Just after 1:00pm, Dean had sent 2 personnel from the 1 x 7 crew to commence spraying on the western end of the northern batters. These personnel would have commenced spraying by 1:30pm.

43. At about 1:30pm the Mine Production Superintendent, Matt Weddell, called me and he said that he'd been told that the Hernes Oak fire had flared up. He told me that he was going to go into the Mine, and that I should not worry about going in at this stage. I was concerned enough to go in anyway.

44. I left my house for the Mine at approximately 1:35pm. From my house, it is usually a 15 minute drive to the Mine. I noticed that the wind was shifting around from a north westerly to a south westerly. I seemed to be following the wind change all the way in. When crossing Middle Creek near Yinnar, I observed the CFA attending a fire which I was not previously aware of. This fire was approximately 5 km to the south of the Mine and posed no threat to either the Mine or my property. It did, however, heighten my concern regarding the fire risks to the Mine that day.

45. I arrived at the Mine at approximately 1:50pm, and headed into the Mine Administration Building / Mine Office which is the Mine's major administration building, situated above the southern batters of the Mine.

46. At that time, I was asked by Alan Roach, the Emergency Services Liaison Officer (**"ESLO"**), to go up to the Drilling Depot Road to the north of the Mine to open the locked gates to enable the CFA to obtain access in the event that the Hernes Oak fire reached the Mine. I had one of the sets of keys to this gate. At that time, there was no report of fire activity in or in the vicinity of the Mine. This was a precautionary measure.

47. I took vehicle HP03, which is a 4WD, to open up the gates. As I was driving around the southern batters of the Mine in an anti-clockwise direction, at about 2:00pm, I observed a small fire at the southern outlet of the Mine, in the vicinity of an old conveyor transfer point, known as transfer point 7 (**"TP7"**). The approximate location at which I observed the fire is marked on the Location Plan at **Annexure 8** as fire location **"A"**. The approximate location at which I observed the fire is marked in the photograph below.

48. I immediately alerted the Mine Control Centre to this fire on radio channel [redacted]. All earthworks, 2 x 12 and 1 x 7 crews operate on [redacted] during times of high fire alert. I discovered later in day that the Mine personnel had changed back to [redacted] because of radio interference from the nearby HVP tree plantation. I started also using my mobile phone from that point onwards because I wasn't always obtaining responses over the radio.

49. At 2:00pm, as I was making my way around the eastern batters of the Mine (still heading in a anti-clockwise direction), I observed smoke from about 3 locations to the west of the Mine in the vicinity of Driffield and the Strzelecki Highway. At that time, the smoke was small, but

it was growing, and given the now south westerly wind direction, I formed the view that this was going to pose a serious threat to the Mine. That fire was blowing right towards the Mine, and in particular the operating face of the Mine (which is in the western part of the open cut). I called the Control Centre to report the Driffield fire. I can't recall whether it was on the radio (UHF 29), my mobile, or both.

50. At about this time, I called my wife Lynley at home to tell her to go outside and watch for new fires. I suspected that there was a fire bug in the area lighting fires. This seemed a real possibility as I could see the three sources of smoke close together. I told her to evacuate if required.

51. At approximately 2:05pm, by which time I was on the perimeter road above the northern batters still heading towards the Drilling Depot Road gates, I stopped in the vicinity of the Mine power substation known as Morwell North (**"MWN"**), to speak to Services Supervisor Dean Suares, whom I had seen stationed up there in his vehicle.

52. I understand that the wind in the vicinity of the Mine started swinging around from a north westerly to a south westerly from approximately 1: 30pm. In the 20 minutes prior to this, whilst the Hernes Oak fire was rapidly moving towards the north western corner of the Mine pushed by the north westerly, Dean and his team from the 1 x 7 crew, together with the RTL manned water carts, had been patrolling the north western area of the Mine, monitoring that fire and looking out for spotting.

53. When I encountered Dean on the perimeter road at 2:05pm, I advised him that the Hernes Oak fire was no longer the major threat, given it was now burning away from the Mine following the wind change.

54. I alerted Dean to the existence of the separate Driffield fire to the west of the Mine. Dean got straight on the radio to speak to David Bell (RTL), who had been called into the Mine at approximately 1:30pm, together with some additional RTL contractors, in order to provide additional back up resources if required. These RTL personnel had started arriving from approximately 1:50 pm. Dean requested that David direct resources towards the western part of the Mine, to protect against the new Driffield fire threat. Resources brought into this area at this time included the water carts and earthmoving equipment (graders and dozers) to make mineral earth breaks.

55. Between about 2:10pm and 2:17pm, I opened the Drilling Depot Road gates and took two photos of the Hernes Oak fire activity to the north of the Mine. These photographs are below:

The approximate locations from which the photos were taken are marked as "1" and "2" (left to right respectively) on the Location Plan at **Annexure 8**.

56. At about 2:17pm, I agreed to meet Production Superintendent Matt Weddell and ESLO Alan Roach at the lookout on the southern batters of the Mine to assess the situation. I drove in a clockwise direction around the perimeter of the open cut, back around the eastern batters of the Mine, to reach this location. Throughout this drive, which took approximately 20 minutes, I noticed:

    - a fire truck on the southern outlet in the area that I had previously observed fire activity (fire location "A" on the Location Plan at **Annexure 8**);

    - fire on the floor of the Mine, in the overburden dump area, above the clean water pump station. The location of this fire activity is marked as fire location "B" on the Location Plan at **Annexure 8**;

    - a small fire on the lower level of the northern batters, to the west of the clay capped fire hole. I immediately reported this fire to the Mine Control Centre via mobile or radio. The location of this fire is marked as point fire location "C" on the Location Plan at **Annexure 8.**

57. At this time, in my view, the Driffield fire was not close enough to the Mine to be spotting into it. I also did not observe at this stage airborne embers from the Driffield fire. I consider the northern batters, overburden dump and southern batters fires that I observed were more likely to have been caused by the Hernes Oak fire spotting into the Mine. They had all commenced within a short space of time. Whilst I did not observe any airborne embers from the Hernes Oak fire coming into the northern part of the Mine whilst I was up above the northern batters, I understand that other 1 x7 crew personnel that were positioned closer to the Hernes Oak fire did observe this.

58. On my way to the southern batters lookout, at 2:32pm I took the following photo near the wash down pond at TP5 of the Driffield fire:

The approximate location from which the photo was taken is marked as "3" on the Location Plan at **Annexure 8**.

59. I arrived at the southern batters lookout at approximately 2:38pm. The lookout provides an excellent overview of almost the entire Mine, and was a location at which a number of Mine personnel and contractors met throughout the afternoon on Sunday, 9 February 2014 to assess the fire situation and determine appropriate actions. The location of the southern batters lookout is identified on the Location Plan at **Annexure 8**.

60. In my discussions with Alan Roach and Matt Weddell at the southern batters lookout, we discussed fire break tactics such as making additional mineral earth breaks on the grass level above the western part of the Mine with heavy earth moving equipment and having water carts patrol in the vicinity of the Morwell River diversion in the western part of the Mine Licence area.

61. We also decided to get some more sprays onto the operating face, and to switch off some sprays which we could see operating on the western end of northern batters above pond 8, on 5 and 3 level.

62. We decided this because the Hernes Oak fire risk had passed, and those areas were now wetted down. The fire services system can only supply a certain volume of water. With sprays being activated over a wide area of the Mine given the multitude of the fire risks, this would have been putting a strain on the system. The operating face is also the area of greatest risk, given that it is almost entirely comprised of exposed coal, and it is where the Mine's critical infrastructure is located (dredgers, conveyors, etc).

63. By this time, Mine and contractor crews had responded to the southern batters/ outlet fire (where I had seen a fire truck), the northern batters fire, and had been deployed to the western part of the Mine. Dean Suares' diary notes from Sunday, 9 February 2014, copy at **Annexure 7**, relevantly note as follows:

    - *13:10 – Hernes Rd Fire out of control – tankers and all personnel dispatched to nth batters & Perimiter [sic] Rd – spotted into nth batter!*

    - *2nd fire from Driffield. 1 crew fighting the nth batter fire. All other personnel sent to Morwell River above O/B* [overburden].

    This is consistent with my own recollection of the activity at this time.

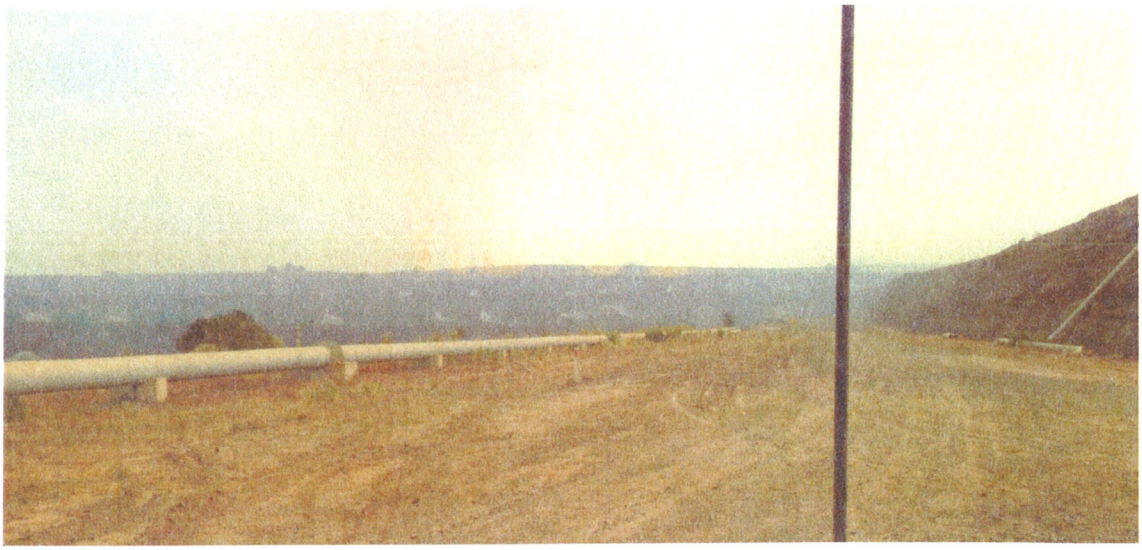
64. Whilst travelling to the northern batters to turn off non-essential sprays, I took a photo at 2:55pm from Groyne 8 of the fire activity on the northern batters. By this time, there was fire activity on level 5, level 3 and possibly level 1. To me, this indicated that the initial fire had jumped up 1 or more levels. The photograph is below:

    The approximate location from which the photo was taken is marked as "4" on the Location Plan at **Annexure 8**. The photo also depicts:

    - the clay capped fire hole on the northern batters (to the east of the fire, partially obscured by a tree); and

    - two operating sprays on 3 level (to the west of the fire).

65. I also took the following photo of the operating face of the Mine at 2:56pm, depicting the sprays operating in that area at that time, as a fire protection measure:



The approximate location from which the photo was taken is marked as "5" on the Location Plan at **Annexure 8**.

66. I turned off non-essential water sprays on 3 and 5 levels at the western part of the northern batters of the Mine to allow additional water for the essential areas. These sprays that I turned off were approximately 1 km away from the location of the northern batters fire.

67. During this activity, I observed aircraft bombing the northern batters fire with water and retardant. Given the prevailing conditions (strong wind and heat), I thought that this bombing was unlikely to control the spread of the fire. A photo that I took at 2:57pm is below:

The approximate location from which this photo was taken is labelled "6" on the Location Plan at **Annexure 8**. The orange spray in the photograph is fire retardant being dropped by the aircraft.

The photo also depicts:

- to the west, several operating sprays; and
- to the east, the clay-covered fire hole on the northern batters.

68. Between about 3:00pm and 3:20pm, I was working on turning off non-essential sprays in the north western part of the Mine.

69. At 3:22pm, I took a video from the north-west part of the Mine, above pond 8 where I had just been turning off sprays. The approximate location from which I took this video is labelled "7" on the Location Plan at Annexure 8. The video is labelled **"Video 1"** on the CD enclosed with this statement. The video depicts sprays operating in the operating part of the Mine, the fire on the northern batters, and the fire in the overburden dump on the floor of the Mine. In the video, as I pan the camera around the Mine, I state as follows:

> *It's 3:22pm . There's a fire [spray] next to us. There's a fire there* [on the floor of the mine]*, there's a large fire on the southern* [correcting myself] *northern batters. I've just turned a lot of sprays off* [above me, in the north-west part of the Mine] *to get some [more] water onto the operating faces.*

From here, I stayed around the north-west part of the Mine between approximately 3:25pm and 4:15pm, helping out and observing as best I could. The RTL crew, being led by David Bell, were working at frenetic pace in dozers and graders, taking measures to protect the Mine from the advancing Driffield fire. The Driffield fire was burning directly towards the operating face, and was definitely the critical risk at this time.

70. There would have been approximately 6 personnel in the western part of the Mine clearing mineral earth breaks and patrolling for fire in water carts. These included the 1 x 7 crew, and additional RTL personnel that had arrived at the Mine to assist. During this same period, some personnel from the 1 x 7 crew (and as I found out later, Diamond Protection, and the 2 x 12 crew) were fighting the fire on the northern batters.

71. I took a video at 3:38pm, from 1 level road, of the fire activity on the northern batters. The location from which I took this video is labelled "8" on the Location Plan at **Annexure 8**. A copy of the video is on the CD enclosed with this statement, and labelled **"Video 2"**. In the video, I state as follows:

> *That's the fire at 3:38[pm] on the northern batters.*

72. This video was taken only 40 minutes after my 2:55pm photo of the northern batters fire (above), and indicates how quickly the fire had grown in size.

73. Whilst I was mainly focussed on the RTL personnel in the western part of the Mine at this time, I came to learn later that the northern and southern batters fires and the fire on the floor of the Mine were all being fought in this period by a range of Mine personnel. I had limited visibility into these areas, which were quite some distance from where I was located.

74. I was also generally aware of one or more small spot fires in the operating area of the Mine, towards the tail end of conveyors, which were successfully extinguished by Mine. As these occurred later in the day, I believe that they were due to spotting from the Driffield fire.
75. At 3:58pm I took a video from the north west part of the Mine, showing the proximity of the Driffield fire activity. The location from which I took this video is labelled "9" on the Location

Plan at **Annexure 8**. A copy of the video is on the CD enclosed with this statement, and labelled **"Video 3"**. In the video I state as follows:

> *I'm over near the RTL yard. The fire is about to cross into the Mine. It's 3:58. That's the Morwell River below us. It's about 10 minutes away I reckon from getting into the [open] cut.*

76. By this time, I was convinced that this fire was going to hit the operating area of the Mine front on, and that the Mine was almost certainly going to be lost. However the Morwell River diversion, which is only 10 metres wide, coupled with the efforts of the RTL and Mine workforce on the Mine side of the river, prevented the Driffield fire from reaching the operating face of the Mine.

77. At 4:11pm, I took a video from the north-west part of the Mine, showing the Hernes Oak fire, and the extent of the fire activity within the open cut. The location from which I took this video is labelled "10" on the Location Plan at **Annexure 8**. A copy of the video is on the CD enclosed with this statement, and labelled **"Video 4"**. In this video, I only state the time. As I swing the camera around, the video depicts:

    - the Hernes Oak fire activity to the north of the Mine;
    - [looking across the Mine's ponds on the floor of the Mine] the large fire on the northern batters;
    - thick smoke within the western part of the open cut at this time, impairing visibility;
    - the strength of the wind; and
    - at the end of the video, one of the 30,000 litre water carts patrolling the north west part of the Mine, on returning to refill at a nearby tanker filling point.

78. Between 4:15pm and approximately 4:40pm, I returned to the northern batters to turn on sprays proximate to the location of the fire, in an effort to establish a water "break" between the fire and the operating face. In some locations, I removed the head off the spray so that the water would shoot up into the air, and wet the surrounding area down. During this period, I encountered Romeo Prezioso, who was in the Mine assessing the northern batters fire, and also activating sprays

79. During this period, at 4:24pm, I took a video of the fire on the northern batters. The location from which I took this video is labelled "11" on the Location Plan at **Annexure 8**. A copy of the video is on the CD enclosed with this statement, and labelled **"Video 5"**. In this video, I state only my location and the time. The video depicts:

    - the extent of the northern batters fire, which by this time covered multiple levels and a considerable width. The fire was burning upwards, as shown by the smoke;
    - Mine personnel communicating on the radio; and
    - towards the end of the video, darker smoke emerging from below, most likely connected to the fire on the floor at the Mine at the overburden dump.

80. Dean Suares' diary notes from Sunday 9 February 2014 at **Annexure 7** contain the following reference to fire activity at around this time:

> *1600 [4:00 pm]- Fire out of control Nth Batter + spot fires coming into Mine from Driffield fire*

Dean's comment that the northern batters fire was out of control at 4:00 pm is consistent with my own recollection of the state of that fire at 4:00pm.

Dean's comment in relation to spot fires coming into the Mine from Driffield at 4:00 pm is consistent with my recollection of the reports made by Mine personnel of spot fires in the operating area of the Mine, and is consistent with my own view regarding the likely view of those fires being the advancing Driffield fire.

81. I took a further video at 4:27 pm. The approximate location from which I took this video is labelled "12" on the Location Plan at **Annexure 8**. A copy of the video is on the CD enclosed with this statement, and labelled **"Video 6"**. This video depicts:

- a spray that had been activated on the northern batters;
- the fire activity occurring underneath power lines running up the batter; and
- Mine personnel communicating via radio.

82. At 4:40pm, I agreed to meet other Mine personnel including Romeo Prezioso, Matt Weddell and Alan Roach at the Mine Incident Control Centre (**"ICC"**) which by this time had been established in the Mine Training Centre above the eastern batters of the Mine. The purpose of the meeting was to regroup and determine priorities.

83. I travelled to the Mine ICC through the floor of the Mine, via the number 5 groyne, checking fire impacts on the way.

84. As I passed the southern batters of the Mine, I discovered that the fire near the southern outlet that I had reported earlier in the day had grown in size. I took a video from the top of the M305 ramp at 5:00pm. The approximate location from which I took this video is labelled "13" on the Location Plan at **Annexure 8**. A copy of the video is on the CD enclosed with this statement, and labelled **"Video 7"**. This video depicts:

- smoke from the fire at the southern batters (on the left hand side, coming over the embankment, as you look down the ramp);
- in the background of the ramp, a variety of sprays operating within the Mine; and
- as the camera pans around, looking across the Hazelwood Ash Retention Area (**"HARA"**) (which is an ash dump on the floor of the Mine at the eastern end), the fire on the northern batters.

85. At 5:00pm, I attended a short discussion in the Mine ICC. Romeo Prezioso was acting as the Emergency Commander at that time and other mine personnel were there, including Matt Weddell and Alan Roach. The northern batters fire was the key concern being discussed at that time, and there was some discussion about the risks that it posed to key infrastructure

on and above the northern batters. I did not see any CFA personnel in or around the ICC at this time, and up until this point I had not seen any CFA trucks within the Mine throughout the entire afternoon, though I had observed some aerial bombing of the fire on the northern batters which I assumed was being undertaken by CFA aircraft.

86. At 5:22pm, I left the ICC and travelled to the Mine's front gate house, and then back towards the rear slide gate next to Energy Brix, where I observed fire along Lower Ridge Road adjacent to the Mine's Morwell East ("**MWE**") substation. I arranged for a furphy to attend this fire. I returned to the ICC at 5:47pm and left a crew fighting the fire.

87. At 5:53pm I travelled towards the front gatehouse again from the ICC and during the drive noticed that smoke from the southern batter fire was increasing. I was concerned about the risk that this posed to Mine infrastructure in that area such as the M690 conveyor.

88. At 6:02pm, I drove back to the M305 ramp on the southern batters to turn on sprays to try to contain the fire beneath that location. As I attempted to activate sprays on the M305 conveyor, I found that no water was being discharged. When I placed my hand over a pipe at that location, it was "sucked" towards the pipe. This indicated to me that the water in the fire services system was being drawn towards other parts of the Mine.

89. I drove to the "head end" of the M690 conveyor, near Energy Brix Australia's property in the eastern part of the Mine. I advised two Energy Brix personnel that I observed looking over the fence into the Mine that we had no water in that area, that a fire was coming, and that we weren't in a position to stop it from getting into the Energy Brix's ditch bunker, and the conveyors. I attempted to turn on sprays at the head end, however this was unsuccessful as there was no water present. I later learnt from Dean Suares that he and Tony Marino (1 x 7 crew member) had also attempted to turn on sprays but also found that there was no water.

90. Indeed, after I left that area, within approximately an hour, the ditch bunkers, M690 conveyor and an Energy Brix conveyor were all burnt out as the fire on the south eastern batters burnt its way out of the open cut. The location of this fire activity is marked as "D" on the Location Plan at **Annexure 8**.

91. At 6:56pm I left the ICC with Kerry Clissold (Fire Service Leading Hand, who by this time had been called into the Mine) and spent the next half an hour trying to get water/pressure to the M690 conveyor. Power to the Mine had been lost, and our efforts were unsuccessful. During this period, we visited the Booster Pump station (near TP5) and the clean water/dirty water interconnection mains and were switching valves to get as much water into the fire services system as possible. We subsequently returned back to the ICC at 7:20pm, and shortly afterwards found out that M690 had been burnt by the fire.

92. Dean Suares' diary notes from Sunday, 9 February 2014 at **Annexure 7** refer to the fire activity between 5:00pm and 6:00 pm as follows:

    1700 [5:00 pm] → Mine on fire

    1800 [6:00 pm] → M690 → out of control

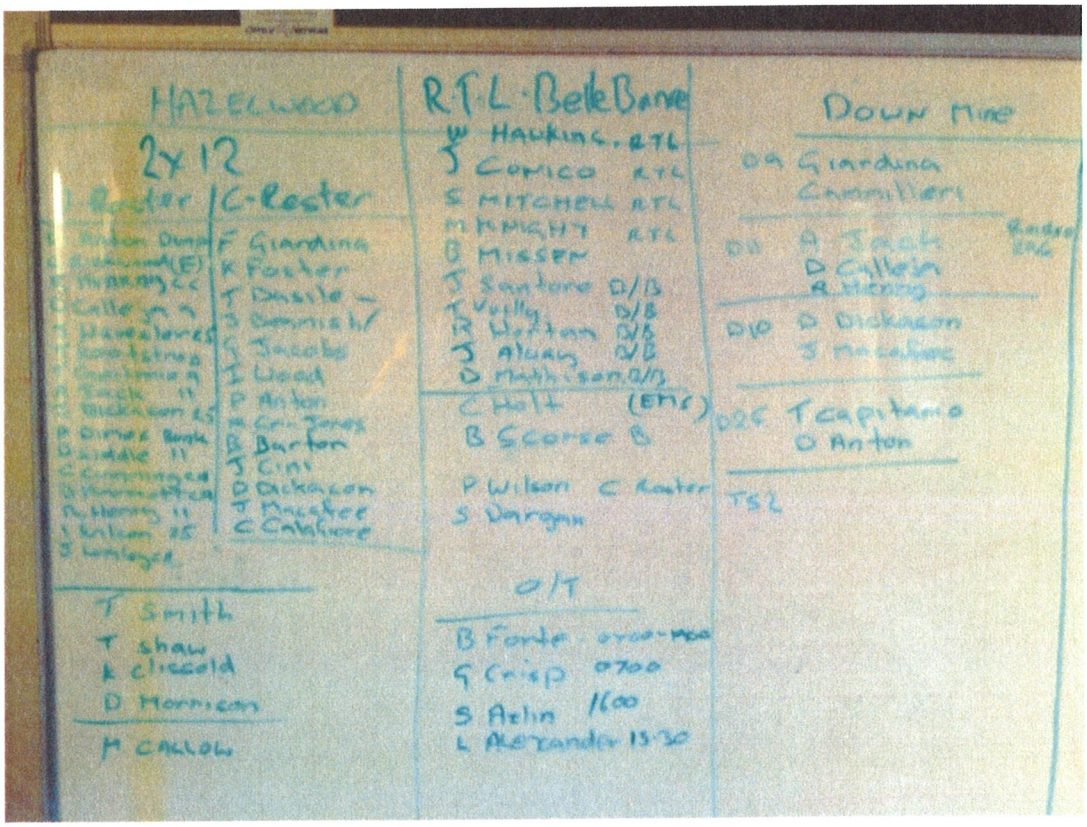
    I understand Dean's 5:00 pm note as reflecting the extent of the fire activity within the Mine at that time (i.e. on the northern batters, the overburden dump on the floor of the mine, and on southern/eastern batters). This is consistent with my own recollection.

I understand Dean's 6:00 pm note as referring to the fire damage caused to conveyor M690 as the fire made its way out of the open cut at the eastern end. This time entry is generally consistent with my own recollection on the day.

93. From 7:20pm, I was involved in planning priorities for the night shift such as fire patrols and asset protection. Mine personnel were coming in to commence night shift, and other Mine personnel and contractors had been called in. In addition to RTL personnel, some of the contractors called into the Mine, or otherwise working at the Mine on Sunday, 9 February 2014 and involved in the early fire fighting efforts, included employees of Belle Banne contractors, whose regular responsibilities relate to maintenance of the conveyor belt system within the Mine.

94. At 7:45pm, the ICC was moved from the Training Centre above the eastern batters, to the Mine Administration building, due to a loss of power which I estimate would have occurred approximately 1 hour earlier. By this time, I was aware that there were some CFA personnel on site, including Peter Lockwood or Ross Male.

95. Prior to leaving the Fire Services Office at 7:45 pm, I took the following photo of the various personnel at the Mine, which at that time was being tracked on a whiteboard:



96. During this period, there was a change over between the operations day shift (7am – 7pm) and night shift (7pm – 7am). Some day shift personnel had stayed late, and some night shift personnel had started early.

97. The loss of power to the ICC was caused by power lines on the north and eastern batters coming down due to poles or cross arms being burnt. Throughout the evening, I saw the

poles in the north eastern part of the Mine on fire, and could see power lines dropping. The ICC was moved from the Mine Training Centre to the Mine Administration building at 7:45pm, in the hope that there would be power there. Unfortunately the power had been lost there as well. Mobile lighting plant was set up outside the windows of the Conference Room in the Mine Administration building, to provide some light to work in.

98. The loss of the power had impacted upon the electric pumps which power the fire services reticulated water system throughout the Mine. In an effort to restore the power in a timely manner, and in the meantime to supply as much water to the fire services pipelines in the Mine as possible, I recall that the following tasks were undertaken:

    - SP Ausnet operators and linesmen were called onto site to locate and try to isolate and/or repair the faults;
    - Mine personnel and electricians inspected the various pumps on the Hazelwood Cooling Pond, and on the floor of the Mine, to see if power could be restored;
    - switching was undertaken at various Mine substations, so as to provide power to pumps through the Morwell East substation (**"MWE"**) which had not been affected by the burnt SP Ausnet lines;
    - the "gravity fed" water pipeline between Loy Yang and Hazelwood was charged, so as to provide some water to the fire services system; and
    - Mine personnel switched off the many of the sprays that had been activated in the Mine's operating face as a fire protection measure, but which were no longer required given the reduced threat from the Driffield fire as the night went on.

99. I worked throughout that evening until 8am the next day. James Faithfull took over as Hazelwood's Emergency Commander on the evening shift.

100. From 8pm onwards, it is more difficult for me to recall specifically what I was doing at any particular time due to the amount and variety of the many tasks that I assisted with.

101. I can recall that at some point throughout the evening, I was with various electrical personnel within the substations, and was out with various Mine personnel in the field looking at pumps and fire impacts/threats.

102. Throughout the night, the large fires on the northern batters, the southern and eastern batters, and on the floor of the Mine were not being actively fought, due to extremely dangerous conditions (in particular the heat, fallen power lines, smoke and related difficulties with visibility) and because the power failure impaired the reticulated fire services water system. Carbon monoxide was identified as a potential hazard early in the piece.

103. The activities that were being conducted during the night that I was aware of, included:

- patrolling around the perimeter of the open cut, monitoring and extinguishing spot fires;
- monitoring the progress of the fires on the northern, eastern and southern batters, i.e. watching for flare ups;
- assessing fire damage;
- protecting key Mine infrastructure, including power substations and high voltage power lines;
- to the west of the open cut, monitoring the progress of the Driffield fire which was slowly burning along the Morwell River, and patrolling for spot fires;
- escorting SP Ausnet personnel around the Mine to assess fire damage to SP Ausnet power assets;
- escorting CFA trucks around the Mine; and
- planning for fire fighting activities the following day, in consultation with the CFA.

104. Ross Male, a Divisional Commander in the CFA, was in the ICC overnight, and prepared notes summarising the plans for the following day. These notes summarised the arrangements decided upon by James Faithfull, myself and other Mine personnel. I signed a copy of these notes, as did James Faithfull, on behalf of the Mine. A copy of the notes is at **Annexure 9**.

105. I worked at the Mine until at 7:45 am on Monday, 10 February 2014, at which time I went home.

106. In the days following the immediate emergency, there continued to be a need for a fire response and recovery effort. I worked a night shift within the Mine ICC on Monday 11 February 2014, and then day shifts approximately 6 days per week for the remainder of the fire fighting operation up until the fire was declared contained by the CFA after approximately 45 days.

DAVID ANTHONY SHANAHAN

Dated: 21 May 2014