

**IN THE MATTER OF  
The Hazelwood Coal Mine Fire Inquiry**

**STATEMENT OF CRAIG WILLIAM LAPSLEY**

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I, CRAIG WILLIAM LAPSLEY, of Level 26, 121 Exhibition Street, Melbourne, Victoria, Fire Services Commissioner, can say as follows:

**A. Introduction**

1. I am the Fire Services Commissioner. This is a statutory office established under s 4 of the *Fire Services Commissioner Act 2010 (FSC Act)*. Although this is a statutory office, the FSC Act falls with the portfolio of Acts administered by the Minister for Police and Emergency Services (**Minister**), the Hon. Kim Wells MP. I am principally based at 121 Exhibition Street, Melbourne, Victoria.
2. My full name is Craig William Lapsley. My date of birth is 10 September 1964.
3. I have been in this role since the FSC Act commenced in 2010. I have operational and non-operational responsibilities. My statutory functions and powers are set out under s 10 of the FSC Act. My operational responsibilities are derived from s 16 of the *Emergency Management Act 1986 (EM Act)* under which I have overall control of response activities in relation to 'major fires'. In effect, I am the senior operational fire officer in Victoria. The definition of major fire in that Act is very broad and includes fires that may occur. My primary non-operational responsibilities involve managing the implementation of reform in Victoria's fire services agencies (these being the Country Fire Authority (**CFA**), Metropolitan Fire and Emergency Services Board (**MFB**) and the Department of Environment and Primary Industries (**DEPI**), the setting of performance standards and the development of incident management operating procedures. One of my functions is to manage the State's primary control centre for the response to emergencies (known as the 'State Control Centre' (**SCC**) which is currently at 8 Nicholson St, East Melbourne). I also have statutory responsibilities in relation to the issuing of community warnings in relation to fires. The office of the FSC was established in response to the Royal Commission into the 2009 Victorian Bushfires, which identified a need for a greater level of leadership as between the fire services in both operational and non-operational matters.

4. During the Hazelwood Coal Mine Fire, I had overall control of response activities to all major fires in Victoria as I was exercising the role of State Controller, working from the **SCC**. The State Controller is the senior operational person who provides strategic leadership for the response to emergencies across Victoria.
5. I hold the following accreditations:
  - 5.1 Level 3 Incident Controller – accredited and endorsed, Australasian Interagency Incident Management System (**AIIMS**);
  - 5.2 Graduate Certificate Applied Management (Australian Institute of Police Management);
  - 5.3 Graduate Certificate Business Administration (Swinburne University of Technology); and
  - 5.4 Graduate Diploma Business Administration (Swinburne University of Technology).

I have also undertaken specialised training in the following areas: Counter Disaster Planning, Strategic Planning Plus, Performance Management and Measurement, Business Continuity Planning, Advanced Structural Fire Protection, Protective Equipment and Environmental Management, Aviation and Air Observation, Fire Weather, Media and Community Engagement.

6. I am a member of the State Crisis and Resilience Council (**SCRC**) and Chairperson of the following Victorian Government Committees and Boards:
  - 6.1 **SCRC** - Capability and Response Committee;
  - 6.2 State Fire Management Planning Committee;
  - 6.3 State Emergency Management Team (**SEMT**); and
  - 6.4 State Control Team (**SCT**).
7. I am a director on the boards of the Association of Public-Safety Communications Officials Australasia, Volunteering Victoria, Emergency Services Foundation, the Bushfire Cooperative Research Centre and the Bushfire and Natural Hazards Cooperative Research Centre. I am also Patron of the Search and Rescue Dog Association, the Bendigo Football Netball League and the Central Victorian Fire Preservation Society, as well as Chief Patron of the Road Rescue Association Victoria.
8. I have been involved in the emergency management sector for over 30 years. The following summarises my experience in the sector:
  - 8.1 I have spent the majority of this time working in CFA, firstly as a volunteer fire fighter. I worked for CFA as a paid employee for 26 years, working across a number of CFA Regions in functional management positions. I ceased employment at CFA in 2007 with the rank of Deputy Chief Officer.
  - 8.2 In 2007, I was appointed Director — Emergency Management, in the then Department of Health and Human Services and was responsible for the health sector emergency response to major incidents including mass casualty, pre-hospital (ambulance) and hospital surge capability. In this role,

I was responsible for the State coordination and management of recovery arrangements for all emergencies, including recovery efforts after the 2009 Black Saturday fires.

- 8.3 In 2005, I was seconded from CFA to Victoria State Emergency Service (**SES**) to assist with SES's transition to becoming a statutory authority. As part of this secondment, I became the Director of SES and later the Acting Chief Executive Officer.
- 8.4 I have worked closely with interstate fire services. This includes a secondment, in 1996, for two years to New South Wales (**NSW**) Fire Brigades (based in Sydney) in the role of Manager State Operations, with responsibility for State Operations and specialist response in rescue, hazardous materials and bushfire.
- 8.5 I have previous direct experience in the management of open cut coal mine fires. In October 2006, I was involved in my role as Deputy Chief Officer CFA at a major fire in the Hazelwood Coal Mine (**Mine**)<sup>1</sup>. I had no direct operational control of this incident, however, I assisted in developing strategy and planning in the response activities.
9. For completeness, on 1 May 2014, the Minister announced my appointment by the Governor-in-Council as Victoria's first Emergency Management Commissioner (**EMC**) with the commencement of the *Emergency Management Act 2013* in 2014 and the establishment of Emergency Management Victoria (**EMV**), the new all-hazards emergency management body. EMV will come into being on 1 July 2014. This new role replaces that of Fire Services Commissioner and builds on the work of my current office, the SCC and the agencies in building an all-hazards approach to emergency management in Victoria.
10. This statement has been prepared in response to a request made by the Hazelwood Coal Mine Fire Board of Inquiry (**Board**) by letter of 28 April 2014 (the **Letter**).
11. The Letter requested that this statement cover the following topics (and posed certain questions as per the questions attached to the Letter):
- 11.1 Origin and circumstances of the relevant fires (questions 1-5 of the Letter);
- 11.2 Response by the fire services (questions 5-13 of the Letter);
- 11.3 Communications by the fire services (questions 14-15 of the Letter);
- 11.4 Preparedness of the fire services (questions 16-20 of the Letter); and
- 11.5 Prevention (questions 21-25 of the Letter).
- The Letter also invited me to include any other matters, beyond those referred to in the above topics, which may assist the Board in inquiring into the matters set out in its term of reference.
12. This statement has addressed each of these matters. For simplicity, this statement has adopted the topics set out in the Letter as headings. It has also repeated each of the relevant questions posed by the Board.

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<sup>1</sup> In some parts of this statement, to avoid confusion, I have referred to the Mine by its full name, particularly when referring to other mines in the area.

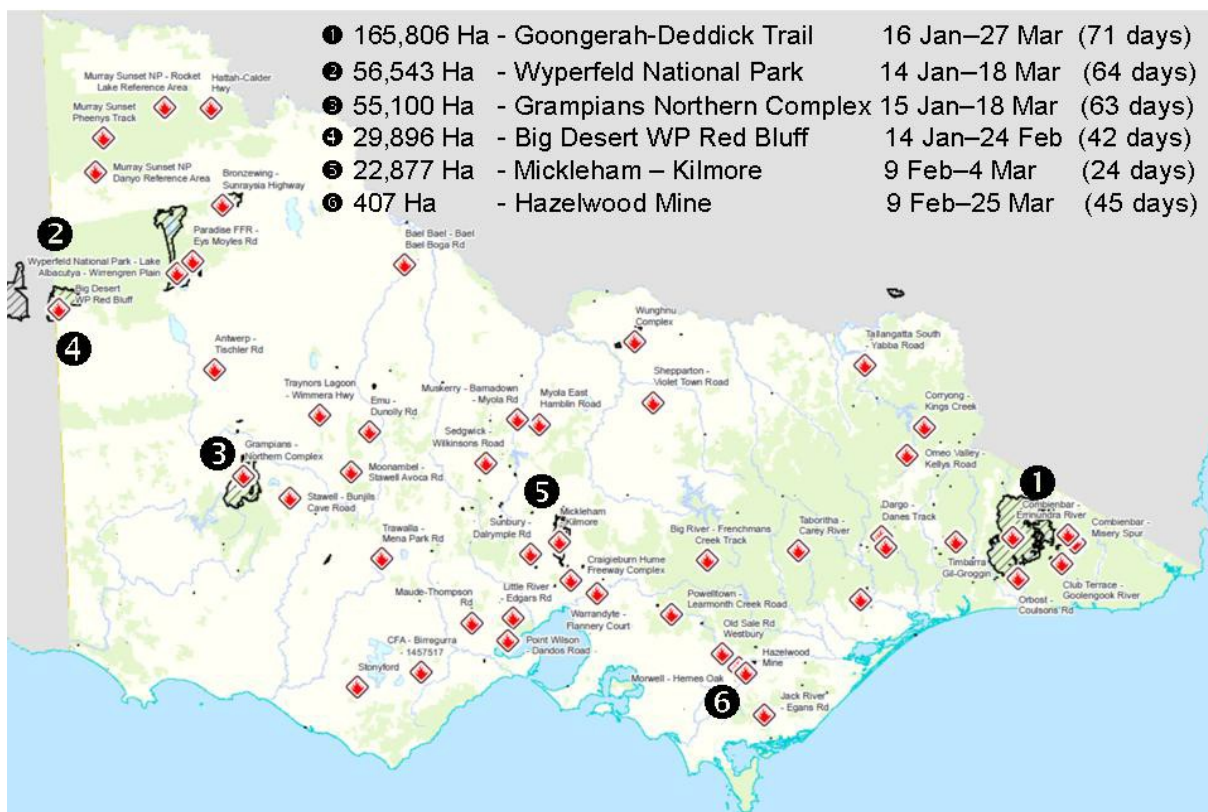
13. This statement is comprised of information, in part, from my personal experience and knowledge. Given the scope and nature of the information that I have been requested to provide in this statement, it is also comprised of, in large part, information that I have ascertained from making inquiries of staff working at the SCC, in my office and inquiries of other agencies, including fire services. Where information has been provided as a result of my making such inquiries, to the best of my knowledge that information is true. I have taken care to ensure that this statement has made it clear when it has addressed or described matters around which there is any residual uncertainty.

## **B. Origin and circumstances of fires**

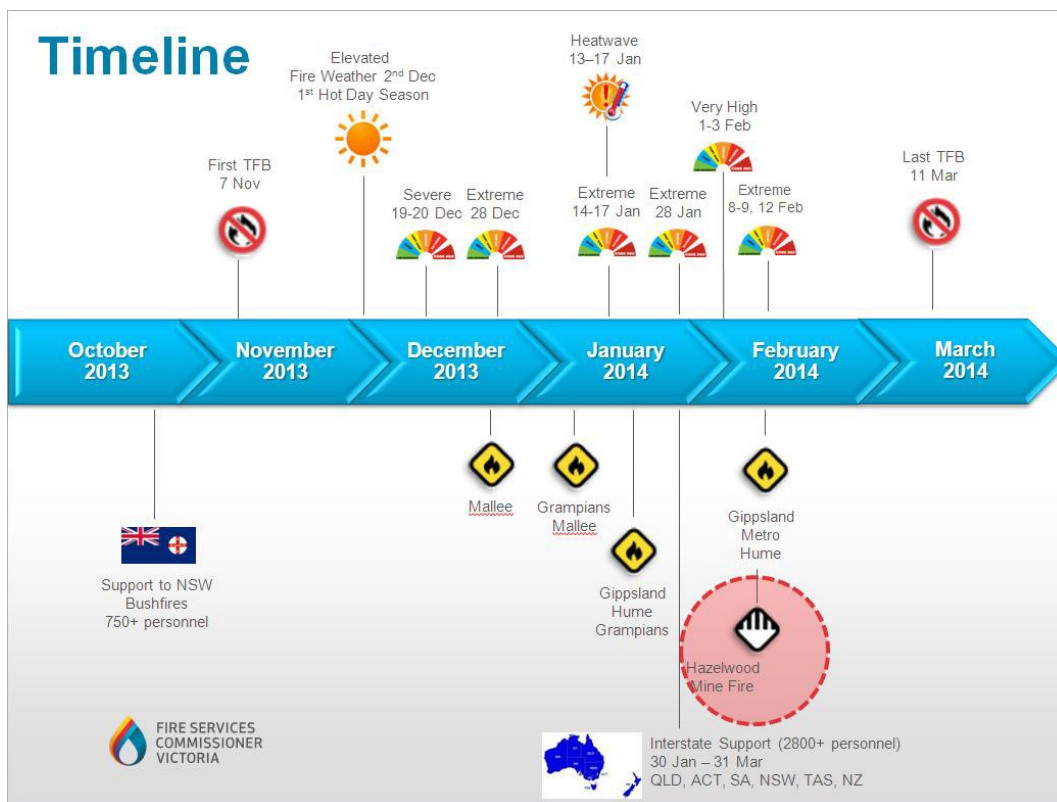
***Question 1 — Outline the weather conditions leading up to and on 9 February 2014, including reference to any fire weather warnings issued by the Bureau of Meteorology and the declaration of a Total Fire Ban for 9 February 2014.***

14. By the middle of January 2014, the weather across much of Victoria was hot and dry. Much of the grassland across the State had been dried out and presented a significant fire risk, particularly north of the Great Dividing Range. By this time, many forest areas across Victoria were also dry enough to present a similarly significant fire hazard. These conditions, particularly under north winds, suggested that there could be high rates of fire spread. There was also significant fire activity due to ignitions from dry thunderstorms.
15. There were some significant fires in December-January 2014, including the 55,100 hectare fire in the northern Grampians region. Planning was undertaken to prepare to issue what would be Victoria's first 'Recommendation to Evacuate' using the guidelines and procedures developed following the Black Saturday Bushfires in 2009 and the subsequent Royal Commission. This fire lasted 62 days. There were other major fires including the Goongerah–Deddick Trail fire in East Gippsland which started on 16 January 2014, burnt 165,806 hectares and lasted a total of 71 days.
16. The Bureau of Meteorology (**BOM**) has subsequently noted that an extreme heat wave affected Victoria from the 13 - 17 January 2014. Numerous records were broken for extended periods of heat. Most notably, the averaged data revealed that Victoria had its hottest four-day period on record, for both maximum and daily mean temperature. In both cases these surpassed records set in 2009, while for three-day periods the 2014 heatwave ranked second behind that of 2009. Attached is a copy of the BOM Summary of Significant Fire Weather Conditions for Season 2013-2014 ([\[FSC.0006.010.0078\]](#)).
17. The following figure is a graphic overview of the major fires in the 2013-14 bushfire season. This figure provides some indication of the relative burden on the fire services both before and after 9 February 2014 and the scale of these fires.

## Overview - Fires / Incidents of Interest



The following is depiction of the 2013-14 bushfire season in the form of a timeline:



18. In the west of the State, two significant fires in the Wyperfeld National Park and in the Grampians National Park began on 14 and 15 January, respectively, and immediately placed a demand upon the State’s fire fighting resources. Lightning

strikes across the state ignited fires in both the west and the east in heatwave conditions. Both fires continued to burn for the next two months.

19. As a result of the Grampians fires, the heatwave conditions and prospective weather for the remainder of the summer, a special meeting of the SCRC was held on 21 January 2014. The SCRC is the co-ordinating group of departmental secretaries and agency heads focussed on the consequences of any significant disasters for the State. SCRC members were directed by the Chair (Secretary, Department of Premier and Cabinet) to familiarise themselves with the arrangements for declaration of a Code Red day and to report back to the chair on their department's or organisation's preparedness for a Code Red day.
20. By 31 January 2014, 11 significant fires were still listed as going in Victoria, mainly in East Gippsland (Club Terrace, Goongerah and Snowy River clusters) and being managed from the Orbost Incident Control Centre (**ICC**). Four of the fires that would eventually become the largest of the season were already alight. The first week of February was forecast to be very hot across the State, with fire services expecting Monday, 3 February 2014 to be a significant fire weather day due to high temperatures and an early wind change with the potential for lightning. By late Monday afternoon on 3 February 2014, a total fire ban had been declared across Victoria, six new fires had been added to the list of fires still going. Attached is the Declaration of Fire Total Fire Ban for 3 February 2014 ([\[FSC.0006.010.0087\]](#)).
21. Significant planning and preparation commenced for the upcoming weekend and the potential for Sunday, 9 February 2014 to likely be the worst fire weather day in Victoria in the last five years. The SCC Fire Weather Briefing for 10:30 Monday, 3 February 2014 indicated deteriorating weather conditions would arrive by the following weekend, noting that 9 February 2014 would be the next critical fire weather day. Weather is a critical input into establishing the preparedness, understanding the level and location of fire risk across the State, along with actual and potential fire behaviour. The days of 8 and 9 February 2014 were identified as days with likely heatwave conditions similar to those experienced in January 2014. It was also forecast to produce conditions comparable only to those experienced on 'Black Saturday', 7 February 2009. Attached is a copy of the SCC Fire Weather Briefing for 10:30 Monday, 3 February 2014 ([\[FSC.0006.003.0001\]](#)).
22. These matters were considered (and planning undertaken) by the SCT, SEMT and Regional Controller (**RC**) meetings in the days before 9 February 2014. This included planning for the potential for the declaration of 'Code Red' should the fire danger ratings increase, with the forecast temperatures on the Sunday expected to be in the 40s and wind speeds to be between 70 - 100 kph. The community was warned that extreme fire danger ratings would apply across much of Victoria over the weekend.
23. SEMT met on the morning of 3 February 2014, then on the mornings of 6 and 7 February 2014, and in the morning and evening of 8 February and 9 February 2014. The Chief Health Officer Dr Rosemary Lester, the Minister and the Chief Commissioner of Police (**CCP**), Mr Ken Lay attended most of these meetings.
24. SEMT met daily until 20 February 2014 and approximately every three days after that until 24 March 2014. The then Minister for Energy and Resources, Hon. Nicholas Kotsiras MP, attended the meeting on 12 February 2014.

25. At the State level, there were a number of preparedness briefings and also at a Regional level. Liaison with the Commonwealth was established to ensure Commonwealth resources could be called upon if required.
26. The SCC was operating at the highest level of readiness (Tier 3 – Red). At this level, all agencies are represented by Emergency Management Liaison Officers from key agencies, departments and critical infrastructure organisations. The SCT, comprising the fire agencies chief officers, the Chief Health Officer, the Victoria Police State Emergency Response Officer and the Director Emergency Management Health and Human Services met daily in the weeks before the weekend of 8 and 9 February 2014.
27. Due to the foreshadowed Severe and Extreme fire danger ratings, a decision was made early on the morning of 7 February 2014 by the Chief Officer of the CFA, after consultation with RCs, to make an early declaration of a total fire ban across the State for both the following Saturday and Sunday. Attached is the Declaration of Total Fire Ban for 8 and 9 February 2014 ([IFSC.0009.004.0001](#)). A press conference involving myself, Ms Andrea Peace from BOM and Mr Paul Holman from Ambulance Victoria was held at 11 am on 7 February 2014 to provide an overview of the anticipated weather and fire conditions.
28. The 'State Operational Brief – Overview for Fire and Heatwave' was issued on 7 February 2014 for 8 and 9 February 2014 ([IFSC.0007.004.0002](#)). This detailed the readiness arrangements in place or to be put into place, planning requirements and key considerations necessary for the forecast significant fire weather and potential impact. This included testing and ensuring back up and redundancy arrangements at regional and ICCs and, development of the aviation resources plan, including bringing on additional aircraft and arranging access to NSW aviation resources.
29. As part of these arrangements, under the provisions of s 16 of the EM Act, I appointed Assistant Controllers (known as Deputy State Controllers) in overlapping shifts. The Deputy State Controller is an emergency management role. Section 16 of the EM Act specifies the role as 'Assistant Controller'. Deputy State Controller is the term used for consistency of terminology with Victoria's Emergency Management Arrangements and AIIMS.
30. Deputy State Controllers support the State Controller in providing strategic leadership and assist with overall control or can assist with a particular major fire or perform a particular function with respect to a particular or all major fires (eg aviation or planning functions). Among their key roles are to support the State Controller in exercising operational control of major fires, ensuring the Strategic Control Priorities underpin the management of all fires, providing management and leadership of the operational response to major fires, providing leadership and oversight of the operation of the SCC, ensuring the line of control for major fires is in place and operating effectively in accordance with the State Controller's intent.
31. Deputy State Controllers are appointed by the Fire Services Commissioner for a specified period through an 'Instrument of Appointment'. Their appointment is at the discretion of the Fire Services Commissioner.
32. These roles were ongoing for the summer period. Given the apparent risks, on 6 February 2014, I formed the view that a major fire, within the meaning of the EM Act, may occur and maintained overall control of response activities throughout the relevant period. As part of these arrangements, operational oversight of metropolitan and outer metropolitan areas was separated from oversight of regional fires in order

to assist me to better exercise control of response activities in relation to major fires. Two Deputy State Controllers were given concurrent responsibility for the greater metropolitan area and rural Victoria respectively and I ensured that changeover shifts overlapped to ensure situational awareness, capability and capacity was provided over the next 72 hours.

33. By the evening of 7 February 2014, 16 fires were listed as 'going' around the State, including the fire at the Hernes Oak–McDonalds Track Fire (**Hernes Oak fire**), which I understand ignited at around 15:30 to the west of Morwell. The Hernes Oak fire caused the closure of the Princes Highway that day and interrupted regional train services. Strike teams attended to a number of passive fire areas within the fire perimeter.
34. On 8 February 2014, conditions were as forecast by BOM and pointed to worsening conditions on the following day. Attached is the SCC Fire Weather Briefing for 8 February 2014 ([\[FSC.0006.003.0006\]](#)).
35. By 16:00 on 8 February 2014, there were 25 fires listed as 'going' across Victoria. Sunday, 9 February 2014 was forecast to be a critical fire weather day following hot overnight conditions. Attached is the State Situation Report for 18:00 on 8 February 2014 ([\[FSC.0009.002.0001\]](#)). As a result of this, further refinement of planning and arrangements were undertaken on 8 February 2014. Aviation resources for the weekend were bolstered, bringing the numbers to 54 (above the normal base of 42) and access to aircraft from NSW and South Australia had been arranged. The going Gippsland fires retained a significant commitment of aircraft, including nine helicopters and five firebombers, supported by an additional six aircraft provided by NSW. In addition, aerial intelligence gathering was being conducted from specially equipped aircraft.
36. On the 8 and 9 February 2014, full day and night shifts were run at the SCC. The State Operational Plan identifies in detail where resource were deployed in preparation for the anticipated conditions on 9 February 2014. All CFA fire fighting resources were at maximum levels of readiness with DEPI resources at lower levels of availability due to commitments to the existing fires. Based on an analysis of risk, arrangements were put in place to pre-position various resources and maintain them in a ready-to-deploy state. This included cross-agency arrangements for the MFB being able to backfill into CFA stations. Up to 60 vehicles were made available by forestry industry brigades in south-western Victoria. NSW resources were also ready to backfill or supplement Victorian resources. Attached is a copy of the State Strategic Resource Arrangements for Fire Vehicles and Crews — Friday 7 February 2014 - Tuesday 11 February 2014 ([\[FSC.0006.010.0076\]](#)).
37. On 9 February 2014, the fire danger ratings across Victoria were 'Extreme' in six weather districts, 'Severe' in two and very high in the south-west. The fire danger rating in the west and south Gippsland weather district (in which the Mine is located) was Extreme.
38. A comprehensive plan of pre-positioning strike teams at strategic locations was put in place including the movement of southwest and Wimmera region resources to central Victoria to follow the predicted wind change as it moved through the State on 9 February 2014. Slip On and Light Tanker strike teams were prepared for deployment to Gippsland for surge capacity. The MFB provided three strike teams, one to be utilised to release CFA resources and the others to be positioned in the north and south metropolitan areas for reactive deployment, primarily for asset



protection. Two additional MFB pumpers were deployed to Traralgon and Morwell to provide additional security to power stations should these come under threat.

39. All eight regional control centres (**RCCs**) were stood up or progressively stood up according to local conditions and 34 ICCs around the State were either operating, due to existing fires, or would be stood up in accordance with Joint Standard Operating Procedure 2.03 (I understand this document has already been provide to the Board).
40. At 09:00 on 9 February 2014, the temperature at the Latrobe Valley Airport in Traralgon was 33 degrees, ahead of a maximum of 41.2 degrees. The weather deteriorated early in the afternoon as the predicted wind change materialised. A maximum wind gust of 76km per hour was recorded at this site at 13:02. The change was not accompanied by any rainfall. By 15:00, the temperature had fallen to 25 degrees. Attached is a copy of the BOM Summary of Significant Fire Weather Conditions for Season 2013-2014 ([\[FSC.0006.010.0078\]](#)).
41. Several locations recorded a Forest Fire Danger Index (**FFDI**) of 100 or more aided by north-west winds with average wind speeds between 40-60 km. This included East Sale, Melbourne Airport, Mangalore and Swan Hill. A peak Grass Fire Danger Index (which is largely analogous to FFDI) of 150 was recorded at Melbourne Airport. Attached is the SCC Fire Weather Briefing for 10:30, 9 February 2014 ([\[FSC.0006.003.0011\]](#)).
42. Early on the morning of 9 February 2014, I assessed the weather conditions and was appraised of the existing fire conditions by the overnight SCC duty officers. I briefed agency commanders, the Deputy State Controllers, chaired the SCT and refocussed on our priorities. I reiterated the need to stay agile and prepared to move resources according to need. I confirmed in my own mind that we were as prepared as we could be and focussed on the day ahead. I reconfirmed that all SCC staff and agency leaders were aware of their duties and of the expectations upon them.

***Question 2 — Provide an overview of the three fires that spread into the Hazelwood Coal Mine on 9 February 2014, including their point of origin, the approximate time of ignition and their path after ignition.***

43. There were three major fires in the immediate vicinity of the Mine on 9 February 2014, being:
  - 43.1 The Hernes Oak fire;
  - 43.2 The Hernes Oak extension fire of 9 February 2014;
  - 43.3 The Driffield-Strzelecki Highway fire.
44. I understand that detail around exact points of origin of some of these fires and the precise particulars on the location of the fires' penetration into the Mine is the subject of a Victoria Police criminal investigation. In accordance with its ordinary practice in relation criminal investigations, Victoria Police has not disclosed this information to me.
45. The fires of 9 February 2014 in the vicinity of the Mine need to be considered in the broader context of the fire activity elsewhere in the Latrobe Valley and around Victoria on that day. Most importantly, from around 10:15 on 9 February 2014, an outbreak of fire occurred at Jack River, to the south of Morwell. This fire would

develop to 1799 hectares in size by end of the day. This fire drew both physical fire fighting resources from those available to the Region and incident control resources from the same ICC that would eventually also be responsible for the fires adjacent to and in the Mine.

46. As noted above, the Hernes Oak fire ignited on 7 February 2014. CFA has undertaken an investigation into this fire, being the Fire Investigation Management System - Bushfire Report Fire & Incident Reporting System Number: 495857. That report has already been provided to the Board ([\[CFA.0002.001.0159\]](#)). That report concluded that the point of origin was found to be at the remains of a campfire or similar fire located on the north side of a dry dam bank. This was noted to be in a paddock with dry pasture south of the intersection of McDonalds and McGraths Track (gate 115). I understand and have subsequently been advised that the cause of this fire is still subject to police investigation and the ignition is being treated as suspicious.
47. The Hernes Oak fire was held within the fire perimeter by the evening of 8 February 2014. The Regional Emergency Management Team (**REMT**) meeting minutes from the morning of 9 February noted that there was no running edge to this fire as at 10:30.
48. By the afternoon of 9 February 2014, however, the Hernes Oak fire began to spread to the east of the point of ignition, in part, due to predicted increased winds. As noted, the precise circumstances surrounding the Hernes Oak extension fire remain a matter of Victoria Police investigation. As the wind direction moved to the south-west following the change, the Hernes Oak fire breached control lines and began running parallel to north and south of the Princes Freeway. It also spotted to the south of Old Morwell Road in Morwell West, igniting a fire that ran through pine plantations to the Australian Paper Mill at Maryvale.
49. Critically, the Hernes Oak extension fire directly threatened hundreds of homes on the edge of suburban Morwell, spotted into the Yallourn open cut mine and ran to the edge of the Hazelwood mine.
50. The SEMT minutes for the 18:00 meeting on 9 February 2014 note that the fire had escaped the control lines established on the previous day and, as the weather deteriorated in the course of the day, started spotting across to the north-western end of the Mine. I understand that the fire crews employed by the Mine were initially successful in stopping this spotting. As the winds picked up in the course of the afternoon and evening, I understand the fire then spread into the Mine. I also understand that spotting may have occurred to the south-east of the point of ignition, leading to a further fire which may, itself, have then also spotted across into the western side of the Mine.
51. The Driffield-Strzelecki Highway fire ignited on 9 February 2014. The cause of the fire is currently being investigated by Victoria Police. I understand that it is suspected that this fire may have been a result of arson. Partly as a result of the Victoria Police investigation, there have been only limited steps taken by other agencies to investigate the causes of this fire and the precise point (or points) of ignition. I understand that the point (or points) of ignition occurred on the Driffield-Strzelecki Highway to the south-west of the Mine.
52. On a south-westerly wind, the Driffield-Strzelecki Highway fire spread to the north-east in the course of 9 February 2014. I understand that this fire also spotted into the Mine.

**Question 3 — Describe how each fire spread into and took hold in the Mine on 9 February 2014.**

53. This has also been discussed in outlining the respective paths of the fires.
54. During worsening weather conditions in the early afternoon, the Hernes Oak fire escaped its containment lines. A breakaway of the Hernes Oak fire was first reported at 13:15. The fire burned towards Morwell and subsequently spotted into the overburden at the southern end of the Yallourn open cut. It also spotted to the north-east into pine plantations. By 14:30 reports were being received that the same fire was spotting into the Hazelwood open cut coal mine which was being attended to by the on-site mine fire fighting services.
55. At 13:37, fires were reported south-west of Morwell along the Strzelecki Highway at Driffield, heading in a north-easterly direction. Resources and aircraft responded to the fires, with many undertaking direct asset protection as the fire threatened properties. As the fire progressed, significant spotting from the fire reportedly impacted on the Hazelwood open cut coal mine. Victoria Police subsequently confirmed on 25 February 2014 this fire as suspicious and potentially deliberately lit.
56. At 23:03 on 9 February 2014, a 'Watch and Act' warning containing the following information was issued:

Firefighters are working to stop the spread of the grassfire in the DRIFFIELD and HAZELWOOD area. It is not yet under control. This fire is affecting the open cut mine. Fire services and mine management are working to bring this fire under control. Smoke will continue to be visible and affect nearby communities including Morwell...

Attached is a copy of that 'Watch and Act' warning ([\[FSC.0007.003.0024\]](#)). Due to the size and volume of these documents, all advice and warning messages will be separately provided to the Board.

57. As noted, the Hernes Oak fire spotted across into the north-western side of the Mine and took hold in the afternoon and evening of 9 February 2014. The Hernes Oak fire and/or the Driffield-Strzelecki fire may have also spotted across to ignite to the western side of the Mine.
58. The minutes from the 14:30 meeting of the REMT on 9 February 2014 note that the Traralgon ICC was working on the possibility that fire had spread into the Mine. Attached are the minutes of the REMT meeting at 14:30 on 9 February 2014 ([\[FSC.0009.003.0001\]](#)). The minutes of the SEMT meeting at 18:00 on 9 February 2014 note that there were fires in the Mine. Attached are the minutes of the SEMT meeting at 18:00 on 9 February 2014 ([\[FSC.0008.001.0006\]](#)). Due to the size and volume of these documents, the SEMT minutes for the duration of the Mine fire will be separately provided to the Board. By 19:30 on 9 February 2014, there were reports from a briquette factory on the opposite side of (but outside the perimeter of) the Mine operated at Commercial Road, Morwell by Energy Brix Australia Corporation Pty Ltd (**Energy Brix**) of a fire on the eastern side of the Mine. I understand that there was a large shroud of smoke in and around the Mine from the principal fires referred to above, as well as from the Jack River fire still burning approximately 50 kilometres south-east of the Mine. It is likely that there was also smoke from the Mine fire itself.

59. By the morning of 10 February 2014, it was confirmed that a fire had taken hold at the Mine. The minutes for the 07:30 SCT meeting note that the Mine was then on fire and that the Hernes Oak fire had spread to Energy Brix. Initially, the Hernes Oak fire, the Driffield fire and the Jack River fire were all managed by the same ICC at Traralgon, with Divisional command established as an appropriate structure to deal with these outbreaks in line with normal practice. Subsequently a dedicated ICC was established to run the Hazelwood and Yallourn mine fires on 11 February 2014. The Traralgon ICC continued to run the Hernes Oak and Jack River fires (ie the bushfires) as these still required management for many days. The State Situation Report for 11 February 2014 at 06:00 notes that a separate ICC for the Mines had been established. Attached is a copy of the State Situation Report for 11 February 2014 at 06:00 ([IFSC.0006.004.0001](#)).

***Question 4 — State how, when and by whom the spread of each fire into the Mine was detected, and how and when the fire services first became aware of the fires in the Mine.***

60. This has been discussed in the above responses.
61. It is difficult to pinpoint precisely when individual members of the fire services detected the spread of fires to the Mine and became aware of the fires in the Mine. In any case, you have asked when the *services* detected and became aware of this as agencies.
62. As noted above, there were various reports of fires spotting across in the afternoon and evening. These reports came from the GDF Suez fire crews at the Mine and from persons situated at Energy Brix. I understand a number reports were made to the 000 emergency number on 9 February 2014 from members of the public reporting fires and smoke in the area, including in and around the Mine.
63. As noted in response to question 3, the minutes from the 14:30 meeting of the REMT on 9 February 2014 note that the Traralgon ICC was working on the basis that fire had spread into the Mine by that time.
64. Certainly, within Government, this was known, at the latest, by early evening on 9 February 2014. The minutes of the SEMT meeting at 18:00 on 9 February 2014 note that there were fires in the Mine (these minutes were referred to and attached above at paragraph 58) . In the early stages of the Mine fire (and particularly in the night of 9-10 February 2014), the level of smoke and the gradually encroaching darkness made it difficult to accurately ascertain the extent to which the fire had taken hold in the Mine.
65. I understand that fire fighting crews from GDF Suez were active in patrolling and dealing with spotfires into the Mine during the afternoon of 9 February 2014.
66. The overall extent of fire in the Mine was unclear at this stage and would not become apparent until daylight on 10 February 2014.

**C. Response by the fire services**

***Question 5 — In relation to the Hernes Oak fire, describe the response to that fire between 7 and 9 February 2014.***

67. Local CFA resources responded to a rapidly moving grass fire in the Hernes Oak-McDonalds Track area at around 15:15 on Friday, 7 February 2014. The initial response comprised five local brigades, with an additional 6 tankers and two aircraft

dispatched within the first 30 minutes. As the fire developed, additional resources were sought, although the fire continued to be managed locally.

68. By late afternoon, the Hernes Oak fire was being managed from a Local Control Facility (**LCF**) at Churchill. A LCF is an approved facility that can be used as a forward or Division Command Point. They are buildings with resources such as multiple radios, computers and telephones. Some CFA fire stations are equipped to operate as LCFs.
69. The RC, Bryan Russell, was in contact with the SCC and the Deputy State Controller regarding that status of the fire. Fire behaviour had subsided by nightfall on 7 February 2014. The fire reached an estimated 150 hectares in size by 20:00 on 7 February 2014.
70. Transfer of control to the Traralgon ICC occurred by 20:15 on 7 February 2014. The Traralgon ICC was not being staffed overnight on the night of 7-8 February 2014. Consideration was given to transferring control to the Heyfield ICC. However, it was determined that it was best to retain local control, as there was local experience in dealing with fires in the area surrounding the coal mines.
71. At 08:00 on 8 February 2014, the RC was advised by the Incident Controller (**IC**), Laurie Jeremiah, that the Hernes Oak fire was contained and that fire investigation was underway. The Princes Freeway and the regional railway line were closed, the latter having sustained serious damage to sleepers. By 09:30 a control line was established and a dangerous tree assessment was underway along the freeway at the western end of the fire. Some resources were released by the IC to enable them to return home.
72. The prospect of the fire moving into both the Yallourn and Hazelwood mines was identified by the REMT at its 10:30 meeting and again later by CFA Regional Agency Commander Ross Sullivan on the afternoon of 8 February 2014. In view of this, both the Central Gippsland Essential Industries Group (**CGEIG**) and the plantation managers (Hancocks) were consulted.
73. At 15:06 on 8 February 2014, IC Laurie Jeremiah rated the prospect of the fire being held overnight at 60 per cent. At around 15:30, I discussed additional aircraft needs at Hernes Oak with RC Bryan Russell. It was determined that there were already sufficient aircraft available for this fire. As at 23:00 on 8 February 2014, the fire had covered 156 hectares and its perimeter had been fully tracked for patrol by fire fighters. In view of the risk that the Hernes Oak fire could breach control lines and run into the Mine, a Level 3 ICC was put in place at Traralgon overnight and four strike teams were made available for rapid response overnight.
74. At immediate risk in the Hernes Oak/Coalville area were 120 farmlet properties. With the potential for the fire to move early in the morning of 9 February 2014, doorknocking of the area by Victoria State Emergency Service personnel was undertaken on the evening of 8 February 2014 to ensure residents were adequately warned. Key personnel were identified by RC Bryan Russell to form a coal mine Division of the Traralgon IMT, if required. Aviation was readied for a 08:00 start on 9 February 2014.
75. There was ongoing containment and patrol on the Hernes Oak fire on the morning of 9 February 2014. Given that fire activity on the Hernes Oak fire overnight had largely subsided, resources focused on burning trees that could pose problems as weather conditions worsened. This included the use of a bulldozer.

76. Resources from CFA's Southern Metropolitan Region were readied for deployment to Gippsland if required, with two MFB pumpers staged at Morwell and Traralgon to provide additional initial capacity to respond to any fires in the power generation facilities and related critical infrastructure and elsewhere.
77. I have formed the view that the response to the Hernes Oak fire from 7 to 9 February 2014 was commensurate with the threat posed by the fire and that adequate resources led to the containment of the initial blaze.

***Question 6 — Describe the response by the fire services to each of the fires on 9 February 2014, prior to their spread into the Mine.***

78. The description of response to these fires has been addressed in part in the answers to questions 2 and 3 above. I have also been advised that the Board has requested witness statements from the ICs who were in place during the period of the Mine fire, including details about the response to the fire.
79. As I have noted above, the response to the fires in and around Morwell on 9 February 2014 occurred in the context of escalated fire activity in the Latrobe Valley and elsewhere in Gippsland on that day. The resource demands, as a result of the Jack River fire in particular, have already been noted.
80. The response was according to the Line of Control, which I have outlined in response to question 10 below, with resources prioritised and deployed as the demand arose. There was a clear structure in place to enable a response to each reported outbreak, with a nominated Level 3 IC and a Level 3 ICC in place and operating.
81. Two further matters were relevant to the issue of response. First, the speed with which the Hernes Oak extension fire and the new outbreaks along the Strzelecki Highway at Driffield developed. Second, these new threats meant that the protection of human life and property around the Morwell township rapidly became the overarching priority in responding to these fires.
82. It should also be noted that the cause of the Hernes Oak and Driffield-Strzelecki fires is considered suspicious and remains the matter of Victoria Police investigation. I would simply note that arson activity in conditions such as those prevailing on 9 February 2014 would add an unwanted dimension of difficulty to both planning for and responding to bushfire.
83. On 8 February 2014, additional fire fighting resources were dispatched to the Latrobe Valley by reason of the fire situation which existed and the conditions which had been forecast for the following day. In that regard, on the evening of 8 February, two additional strike teams were pre-positioned in the Latrobe Valley and on the morning of 9 February, two fire bombing helicopters arrived.
84. On the afternoon of 8 February 2014 computer modelling suggested that the Hernes Oak fire could spread into a small community to the south-west of Hernes Oak. Accordingly, in the early evening of 8 February, up to 300 people were advised to leave from a small group of farmlets south-west of Hernes Oak. The Traralgon IMT co-ordinated this exercise which was carried out successfully by Victoria Police and the SES.
85. On the night of 8-9 February 2014, the two additional strike teams that had been sent to the Latrobe Valley were activated and started working on the Hernes Oak fire. From shortly after daybreak on 9 February 2014 at least four aircraft were allocated

to the fire. During the course of the day, some of these aircraft were diverted to the Jack River fire which ignited at about 10:15. It was necessary to divert aircraft to that fire because of the immediate threat to life and property that it posed.

86. After it ignited, the Jack River fire became a priority for the Traralgon IMT. That fire destroyed one residence shortly after it started. It also had the potential to make a large, uncontrolled run towards the town of Yarram, if sufficient resources were not allocated to suppress it quickly. As part of the response to this fire, eight aircraft were dispatched, some reallocated from other fires in Gippsland, during the course of 9 February 2014.
87. At approximately 13:15, the north-western area of Hernes Oak fire broke out of its containment lines. It moved quickly in a south-easterly direction towards Morwell and the Mine. It moved so fast alongside and between the railway line and Princes highway that it was unsafe for fire crews to directly attack the head of the fire.
88. When the Hernes Oak fire reached the north-western edge of the Mine, a south-westerly wind change arrived and caused the fire to burn in a north-easterly direction, towards the edge of the west Morwell residential areas. The fire began to burn amongst the houses. It also spotted into the Yallourn open cut mine.
89. The Hernes Oak fire spotted to the west of Latrobe Street and then burned into the plantations north of Morwell.
90. The speed of the fire meant that there was insufficient time between the fire breaking its containment lines and its impact on residential areas to safely conduct an evacuation. At the same time as the fire was burning in the Mine, the protection of the people of Morwell became critical.
91. In the space of just over an hour, significant threats developed to the lives and property of several families, to major infrastructure (the Hazelwood Mine, the Yallourn Mine, Energy Brix and the Maryvale paper mill).
92. Additional firebombing and two fire spotting aircraft were deployed to these fires as part of the response over the course of the 9 February 2014. In addition, two further strike teams in addition to those already in the Latrobe Valley were requested to assist once the fire had breached containment lines.

***Question 7 — State how the fire services gained access to the Mine and assumed control of the response to the fires from the mine operator.***

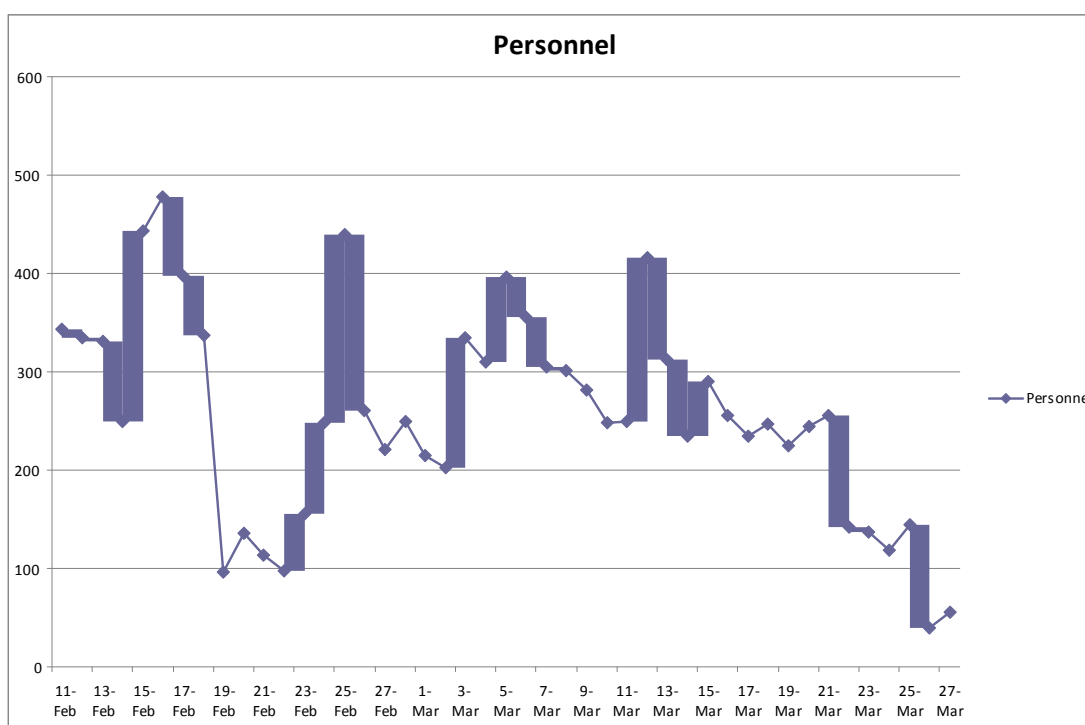
93. It is normal and routine practice for CFA to assume control of fires at the Mine when it is called to respond to them.
94. On 9 February 2014, fire services accessed the Mine through the main gate to the Mine, off Brodribb Road. Strike teams redeployed from Energy Brix to the Mine fire were first the fire service crews on scene. A swipe card for the back gate off Miners Way is held by the Morwell fire brigade. However, this was not used initially as Morwell brigade was committed to the outbreak from Hernes Oak and the protection of life and property in Morwell itself.
95. I understand that at 22:00 on 9 February 2014 at a meeting between Mine management and CFA operational personnel it was made clear that CFA was the control agency for the fire in the Mine. CFA made contact with Mine staff and

informed them that CFA had assumed control and that a strategic plan was being created in partnership with the Mine management.

***Question 8 — Describe the resources - personnel, equipment and supplies - that were deployed to suppress the fire, from 9 February 2014 onwards, and identify the fire services and other agencies that were involved in the response.***

96. Overnight on the night of 9-10 February 2014, one strike team of CFA vehicles was deployed to the Mine. They were tasked with protecting critical mine assets to avoid loss of power generation, which included the 66kv line to the north of the northern batters (being the name given to a part of the Mine from which coal is not currently extracted) that provides power to dredges and to protect the water pumps in the operational part of the Mine. The fire services were successful in this task, both on this first night and throughout the course of the Mine fire, although coal production to the Power Station was interrupted on this first night.
97. The initial strategy for fighting fire in the Mine dictated the resources deployed. This involved protecting the working batter (ie the western part of the Mine from which coal was being extracted), to protect critical infrastructure using tankers and aircraft along with fixed and portable monitors. By the first day shift (starting 07:00) on 10 February 2014, the extent of the fire in the Mine would become evident.
98. The Mine fire was at this stage a division of the Hernes Oak fire. A hand-written Incident Action Plan (**IAP**) developed at the Divisional level overnight on 9 - 10 February 2014 notes that there was extensive uncontrolled fire in unused areas of the Mine known as the northern and eastern batters and on an area in the floor of the Mine. Attached is the IAP for 9 February 2014 ([\[CFA.0007.001.0001\]](#))
99. In the initial stage of the fire suppression activities, the IAP proposes a course of action to be adopted on the following morning. This includes the sectorisation of the Mine fire along with the deployment of four CFA tanker strike teams, one pumper strike team, one hose laying appliance and one teleboom appliance. It also calls for two mobile radio repeaters (noting there is one on site already), health monitoring and HazMat detection monitors to be brought in.
100. From this original plan, more than 7000 personnel, including paid staff and volunteers, would become involved in the fire fighting operations at the Mine and in support roles from 9 February 2014 onwards. Operational resources were drawn from CFA (lead agency), MFB, DEPI (and Network Emergency Organisation partners Parks Victoria, Melbourne Water and VicForests ), SES, Australian Capital Territory Fire and Rescue, NSW Fire and Rescue, Tasmanian Fire Service, Queensland Fire Service, GDF Suez (the Mine operator) and Air Services Australia (Aviation Rescue and Fire Fighting).
101. The following graphic depicts the daily level of Victorian and Interstate emergency services personnel deployed to the Mine fire. The figures includes fire fighters, incident management personnel, staging area and support staff.





Hazelwood Mine Fire, daily number of personnel tasked, 11 February – 27 March 2014

102. A full list of fire services and other agencies and departments involved in the Hazelwood Incident is attached ([IFSC.0009.001.0001](#)).
103. More than 200 individual fire fighting appliances and other apparatus were deployed to the Mine fire, including aircraft, tankers, pumpers, ladder platforms, compressed air foam tenders, thermal imaging cameras, command vehicles and support vehicles.

***Question 9 — Outline the development of the plan to suppress the fires at the Mine from 9 February onwards. Provide a copy of each iteration of the fire plan and suppression strategy, from 9 February 2014 onwards, including any sub-plans or appendices.***

104. Planning for an incident of this nature occurs at a local, regional and State level. From late 9 February 2014 until 10 February 2014, the initial planning for suppression of the Mine fire was developed at incident and regional levels. In order to better coordinate the suppression of the fire in the Mine and facilitate planning, a separate ICC was established for the Mine fire on 11 February 2014 within the Hazelwood Emergency Operations Centre. This was later moved to Traralgon.
105. The initial planning for suppression is contained in the hand written IAP developed on the night of 9 February 2014 referred to above at paragraph 98. Incident Shift Plans (**ISPs**) were subsequently developed twice daily for the duration of the Mine fire, as is the normal procedure during a significant fire event. ISPs are the base planning document for field operations. Attached is the ISP for 10 February 2014 ([IFSC.0006.001.0001](#)). Due to the size and volume of the remaining ISPs, these will be separately provided to the Board.
106. As the Mine fire develops, the ISPs also reflect the strategic planning that developed at a State and Regional level. It should be noted that there were simultaneous planning priorities in relation to other fires in and around the Mine and elsewhere in the Latrobe Valley with the potential to threaten life and property that also had to be dealt with during this period. An example of the Gippsland regional strategic plan for fire control at this time is attached ([IFSC.0006.010.0050](#)).

107. Multi-agency, State level planning in relation to the Mine fire commenced on 11 February 2014. The first iteration of the Latrobe Valley Coal Mines Fire Strategic Plan was issued at 18:00 on 11 February 2014. This initial State-level document was developed with input from the fire agencies, the Mine operators and the CGEIG ([\[FSC.0006.011.1601\]](#)).
108. The objective at this stage was to keep the fire within the disused area, and prevent the loss of power to Victoria due to any loss of critical infrastructure at Hazelwood and Yallourn. The projected timeframe set to contain the fire at this point was 48 hours, with extinguishment within two weeks. There had been no rain and the dry hot weather was forecast to continue.
109. The 11 February 2014 Latrobe Valley Coal Mine Fires Strategic Plan indicates that 40 per cent of the Mine batter and 20 per cent of the Mine floor was on fire. It should be noted that all of this was in the disused part of the mine, which was not being worked. None was in the active production areas of the Mine.
110. One conveyor belt had already been destroyed, one power line remained out of service. Contingency plans were developed for the supply of coal to Energy Brix due to the loss of the conveyor belt. Engineers from GDF Suez were engaged in developing detailed plans and strategies for the continued operation of the Mine.
111. In view of the situation, at my direction, a State Strategic Support Team comprising relevant key SEMT agency representatives was formed to put State level planning of the Mine fire on a sound footing. On 12 February 2014, this group developed the 'State Strategic Support Team Brief – Latrobe Valley Coal Mine' which was revised and updated periodically until 20 February 2014. Attached are the six plans from 12 February to 20 February 2014 ([\[FSC.0006.005.0067\]](#) (please note this is listed as 'version 2' but was the initial version used), [\[FSC.0006.005.0001\]](#), [\[FSC.0006.005.0014\]](#), [\[FSC.0006.005.0027\]](#), [\[FSC.0006.005.0041\]](#) and [\[FSC.0006.005.0054\]](#)).
112. This brief outlined the major requirements for the strategic management of the fire and contained:
- 112.1 incident strategic overview;
  - 112.2 the state priorities – including the principle covering the separate management of the fire and incident control strategies;
  - 112.3 management arrangements – including the control structure and resourcing requirements;
  - 112.4 actions required by agencies to give effect to the planning and requirements; and
  - 112.5 community messaging.
113. The State Strategic Support Team Brief was superseded on 20 February 2014 by the 'Latrobe Valley Hazmat/Fire Plan'. This plan was revised on a weekly basis until 21 March 2014 and distributed to the SCT, SEMT, the RC Latrobe Valley, RC Gippsland and the REMT.

114. Each plan consisted of a number of sub-plans, which are individual documents in their own right setting out at a State level the strategies and objectives for dealing with the Mine fire and its actual and possible consequences. These included:
- 114.1 Latrobe Valley Coal Mine Hazmat/Fire Suppression Strategy Options;
  - 114.2 Latrobe Valley Coal Mine Hazmat/Fire Operational Strategic plan;
  - 114.3 Air monitoring and analysis strategy;
  - 114.4 Health impacts;
  - 114.5 Strategic Health Management Plan – Community smoke impacts from the Latrobe Valley Coal Mine fire;
  - 114.6 Health management and Decontamination Plan – Latrobe Valley Coal Mine Hazmat/Fire;
  - 114.7 Infrastructure Protection Strategy;
  - 114.8 Victoria Police Operational Evacuation Plan;
  - 114.9 Communications and Stakeholder Engagement Strategy; and
  - 114.10 Business Engagement Strategy.
115. The Latrobe Valley Hazmat/Fire Plan subsequently included transition arrangements back to Mine management once identified sectors of the mine were determined safe by the IC. Attached are the four versions of the Latrobe Valley Hazmat/Fire Plan developed in the course of this incident ([\[VGSO.0002.002.0383\]](#) (please note that this is listed as 'version 5.1' but was the initial version used), [\[FSC.0006.007.0103\]](#), [\[FSC.0006.008.0146\]](#) and [\[FSC.0006.009.0055\]](#)).
116. Planning for the Mine fire as it developed reflected a risk-based approach that provided fit-for-purpose solutions in a dynamic and complex environment.
117. In addition, a Performance Reporting Plan was developed by the State Strategic Support Team to provide the State Controller with the achievements made against the objectives set for each of the functional unit plans operating within the Regional Control Structure for the Mine Fire. Performance monitoring became part of the seven-day action plan. The objectives of the performance monitoring were to:
- 117.1 Ensure effective information sharing between functional teams and agencies within the RCC;
  - 117.2 Ensure establishing clear linkages between agencies and functions to focus on interdependent actions; and
  - 117.3 Implement regular performance management processes to support the RC by ensuring that agreed performance was measured and adjustments are made.
118. A copy of the Latrobe Valley Coal Mine Fire Performance and Monitoring Report is attached ([\[FSC.0006.010.0001\]](#)).

***Question 10 — Describe the course of the response from the time the CFA assumed control of the response to the fires at the Mine. Provide copies of situation reports for the fires at the Mine from 9 February onwards.***

119. This incident began as a bushfire. As such, ‘Line of Control’ was established and operating at incident, regional and State levels. The Command and Control Arrangements for Bushfire in Victoria issued by the Fire Services Commissioner contains information that is additional to the arrangements in the State Emergency Response Plan (Part 3 of the Emergency Management Manual Victoria (**EMMV**)) and the EM Act.
120. Command and Control Arrangements for Bushfire in Victoria provide direction to agencies supporting the line-of-control during bushfires by:
- 120.1 Clarifying who is accountable for the command and control of bushfire readiness and response;
- 120.2 Outlining the process for escalating the control of a bushfire from the incident to the regional and state tiers of control; and
- 120.3 Ensuring all agencies work together to support the line-of-control and provide an integrated and seamless approach to bushfire management.
121. Agencies retain command of their own resources and maintain their chain-of-command throughout the bushfire season.
122. ‘Control’ involves the overall direction across agencies of activities in an emergency. Authority for control is established in legislation or in an emergency response plan, and carries with it the responsibility for tasking other agencies in accordance with the needs of the situation. Control relates to situations and operates horizontally across agencies.
123. ‘Line-of-control’ refers to the connection between the controllers at each tier of emergency management. The line-of-control for bushfire is IC, RC and State Controller and people are appointed to these positions throughout the bushfire season, which is generally from 1 October through to 31 May each year.
124. In line with these arrangements, on the afternoon of Sunday, 9 February 2014, CFA Deputy Chief Officer Steve Warrington was sent to Latrobe Valley to oversee the fires in and around Morwell and in particular the fires in the Australian Paper Mill, Yallourn open cut and Hazelwood open cut mine.
125. On Monday, 10 February 2014, both the CFA and MFB Chief Officers attended the Mine to get a strategic understanding in order to brief me on the issues and challenges the Mine fires could present.
126. On Tuesday, 11 February 2014, I requested the CCP send the Strategic Emergency Management Assurance Team (**SEMAT**) to the site. The SEMAT was introduced in December 2009 to contribute to the confidence of the State Emergency Response Coordinator (ie the CCP) that the structures, synergies and processes are in place for emergency preparedness and response. Where required, the SEMAT will attend and undertake an independent assessment of the control and coordination of level 3 incidents. SEMAT is made up of Victoria Police members and the assessments may review all control and coordination points at any tier of the emergency management structure.

127. On Wednesday, 12 February 2014 I visited the Hazelwood ICC to obtain firsthand situational awareness. On Thursday, 13 February 2014, together with the CCP, I undertook a flight over the Mine.
128. In addition to and as a result of these visits, I determined on Thursday, 13 February 2014 that this Mine fire should have a HazMat overlay applied to operations. This influenced the way in which the event was dealt with by the emergency services from this point onwards. It also reflected the complexity of the event as it had evolved by that time. On Friday, 14 February 2014, I decided to engage an external consultant to provide an independent report on the occupational health and safety issues in relation to the deployment of fire fighting resources in the Mine.
129. On Sunday, 16 February 2014, I engaged an expert panel from the fire industry to peer review the extinguishment strategy. The panel comprised: Commissioner Greg Mullins AFSM, head of NSW Fire and Rescue; Adjunct Professor Tim Sullivan, a consulting expert in mining geotechnics; Mr Wayne Hartley, the CEO of the Queensland Mines Rescue Service; and Mr Mark Cummins, a US practitioner with experience in the use of compressed air foam as an extinguishing agent. The role of the panel was to review the extinguishment operations and tactics, methods and systems of work that had been put in place.
130. State Situation Reports were produced daily (or occasionally more regularly) by the SCC at 18:00 for the duration this event. These reports provide an operational overview for all suppression activities across the State. Due to the size and volume of these documents, the State Situation Reports for the relevant period will be separately provided to the Board.
131. SEMT Situation Reports are broader documents than State Situation Reports. SEMT Situation Reports are made available across Government. SEMT Situation Reports were issued on a daily basis for the duration of the fire. They set out, in summary, the overall strategic picture of how the suppression of the fire was progressing, communication and engagement with the public, air/water analysis and monitoring, health impacts, infrastructure protection, government services and transition to recovery. From 10 February to 24 February 2014 these covered all major fires across the State. From 25 February 2014 onwards, these reports dealt specifically with the Latrobe Valley Mine/Hazmat incident. Due to the size and volume of these documents, the SEMT Situation Reports from 7 February 2014-25 March 2014 will be separately provided to the Board.
132. I understand that the minutes of the IMT and REMT meetings set out the details of how the suppression of the fire was progressing, communication and engagement with the public, air/water analysis and monitoring, health impacts, infrastructure protection, government services and transition to recovery. Due to the size and volume of these documents, the minutes of IMT and REMT meetings from 7 February 2014-25 March 2014 will be separately provided to the Board, as will the minutes of Emergency Management Team meetings (which are conducted at the ICC level).
133. The Driffield-Strzelecki fire was contained on 13 February 2014. The Hernes Oak fire, including the fire affecting the Australian Paper Mill, was contained on 13 February 2014. The Yallourn Mine fire was returned to the control of the mine operator on 19 February 2014. The Hazelwood Mine fire was under control on 10 March 2014.

134. These outcomes were achieved as a result of there being robust and adaptive structures in place at a State, regional and local level. These structures were continually reviewed and altered as the circumstances demanded. The dynamic nature of this process is reflected and outlined in the Latrobe Valley Coal Fire/Hazmat Plans.

***Question 11 — Address specifically any difficulties encountered in suppressing the fire, including water supply and reticulation at the Mine and the availability of suitable foam.***

135. The strategy for extinguishing the fire in the Mine evolved over the first five days of activity. During that period containment to the ‘disused batters’ and part of the Mine floor was successful. The strategy was centred on not permitting the fire to spread into the active production areas of the mine. This was successful and allowed power generation to continue.
136. The extinguishment strategy involved applying both fire and hazardous materials (known as ‘HazMat’) procedures and approaches in order to deal with the higher levels of carbon monoxide (CO) that was generated due to the incomplete combustion that occurs in sub-surface brown coal fires.
137. The ‘system of work’ required to have a successful extinguishment strategy involved fire fighters, fire trucks with aerial fire fighting capability (eg ladder platforms) aircraft fire bombers with large buckets, the application of water and foam, the use of thermal imaging cameras and heat detection devices from the ground and air and the use of air and water monitoring equipment.
138. The following challenges were encountered in suppressing the fire:
- 138.1 Fire size and intensity – The extent of the batters involved posed significant fire fighting challenges; the heat, smoke and ash generated from the burning coal was a significant issue;
  - 138.2 Health and safety of fire fighters – Issues included potential exposure to CO levels, and potential for injury from working in a hazardous environment;
  - 138.3 Water supply – There was no reticulated water supply to enable fire fighters to establish a sustained extinguishment operation in the non-working area of the Mine. The use of recycled water posed particular problems in terms of occupational health and safety and the movement of volumes of water around the Mine;
  - 138.4 Water balance – It was critical to balance the water that was being injected into the Mine as part of the fire fight with the water being removed from the Mine to ensure stability;
  - 138.5 Movement of vehicles – As vehicles moved, this had the potential to stir up dust and actually spread the fire;
  - 138.6 Specialised equipment and skills – There was a finite supply of specialist equipment and operators available, especially at this point in a protracted summer fire season. The need to supply compressed air foam systems (CAFS) was identified;
  - 138.7 Localised weather – This includes wind, smoke inversion and impacts within the Mine;

138.8 Stability and geotechnical issues – There was significant potential for collapse of batters and coal within the Mine.

***Question 12 — When were the fires brought under control? Have the fires been completely extinguished? If not, when do you expect this occur?***

139. The Hazelwood Mine fire was declared a ‘going’ fire from 9 February 2014 to ‘under control’ on 10 March 2014 and progressively handed back to the Mine operators. The site was declared ‘safe’ and fully handed back to the Operators on 25 March 2014.
140. ‘Under control’ means that the fire is no longer spreading and that sufficient resources are on hand to prevent spreading.
141. ‘Safe’ means that the fire is out and there is no fire that will create smoke, ash or flames that will impact upon the community. Small pockets of heat in the floor of the mine are covered. From time to time, small amounts of smoke may emanate from these. However, such events do not change the status of the fire.

***Question 13 — Provide your views on what worked well, what did not work well and what could have been done better in relation to the response to the fires at the Mine.***

142. The response to the Mine fire needs to be seen in the context of the overall fire activity in and around Morwell from 9 February 2014. In its initial stages, there were in effect three significant fires: the Hernes Oak fire (including the threat to the Morwell township) and the fires at the Yallourn mine and the Australian Paper Mill and plantations, the Strzelecki Highway fire and the Hazelwood Mine fire.
143. It is important to recognise the efforts of the paid staff and volunteers who responded to this emergency and the outcomes that they achieved. No lives were lost. Private property loss was minimal (no primary residences were destroyed in the Morwell fires). There was no loss of major infrastructure. Power generation for the State of Victoria was not interrupted.
144. In my view the following elements of the response to the fires at the Mine worked well:
- 144.1 Integration – The integration of the fire services agencies worked well and was supplemented informally by the Mine operators;
- 144.2 Adaptive management – Development of an evolving response to a complex set of circumstances through the IMT and REMT;
- 144.3 Health monitoring – The provision of health and safety monitoring for fire fighters;
- 144.4 Strategic planning – The use of a co-ordinated planning and performance framework, including suppression strategies;
- 144.5 Risk-based approach – The matching of resources with risk outside the Mine as the fire danger increased and decreased after the Mine fire began;
- 144.6 Community messaging systems – The provision of messages to and engagement with the community as part of the responses activities of the fire agencies;

- 144.7 New technology application – The trial and, where efficacious, application of new fire fighting technologies, testing of products (eg compressed air and other foams); the use of other specialist equipment (eg thermal imaging cameras, air monitoring equipment);
  - 144.8 Local knowledge – The use of local knowledge in assisting suppression strategies;
  - 144.9 Aviation – The use of aviation both for suppression and intelligence gathering;
  - 144.10 Peer review – The appointment of an expert panel to peer review the extinguishment strategies and tactics being developed in suppressing the fire; and
  - 144.11 Decommissioning – Organised decommissioning process of the emergency services involvement.
145. In my view the following areas of the response are in need of improvement:
- 145.1 Health monitoring – Health monitoring of fire fighting personnel in the initial stages needed to be implemented quickly;
  - 145.2 Equipment – Deployment of equipment and personnel dedicated to Mine fire could have been more expeditious; and
  - 145.3 Resource management – Management of the emergency services staging area at the Mine.

#### **D. Communications by the fire services**

***Question 14 — Set out the communications, advice and warnings by the fire services to the public in relation to:***

- (1) the Hernes Oak fire from 7 February 2014;***
- (2) the other fires that spread into the Mine on 9 February 2014;***
- (3) the fires that burned in the Mine on and from 9 February 2014.***

***Include reference to the communications and stakeholder engagement strategy developed at State level, and attach copies of key communications.***

146. Pursuant to s 24(1) of the FSC Act, I have a statutory duty to issue warnings and provide information to the community in relation to fires in Victoria for the purposes of protecting life and property. Section 26(1) of the FSC Act empowers me to delegate this duty to, among other people, the Chief Officer of CFA. Section 26(2) of the FSC Act empowers a delegate to sub-delegate any such delegation. There is a standing delegation in place, executed by me on 5 January 2011, under which, among other things, I have delegated the duty to warn to the relevant fire agency head in relation to fires occurring in the fire agencies' respective jurisdiction. Attached is a copy of the delegation dated 5 January 2011 ([FSC.0006.010.00331](#)).
147. This delegation was in force for the duration of the fire in the Mine.



148. For the purpose of protecting life and property, dissemination of timely, relevant and tailored warnings and advice is issued to communities. In the first instance, the IC is responsible for authorising all warning and advice message to the community.
149. Warnings and advice messages are based upon templates and scaled to reflect the level of severity of a fire or incident. 'Advice' messages provide general information about an incident. 'Watch and Act' messages indicate that, in this context, a fire is approaching, that conditions are changing and people need to take action to protect life and property. An 'Emergency Warning' indicates people are imminent danger and need to take action immediately as the fire is about to impact upon a particular area. An additional message may be issued to indicate the situation is 'All Clear'. A 'Recommendation to Evacuate' an area may be issued if time and conditions allow, dependent upon a number of factors including safety considerations, the location and type of emergency, access routes and the local environment. Due to the size and volume of these documents, copies of Advice, Watch and Act and Emergency Warning messages issued in relation to the fires in around Morwell from 7 February 2014-1 April 2014 will be separately provided to the Board.
150. Following the 2009 bushfires, Victoria introduced an integrated warnings system based upon the principle of 'One Source One Message'. This provides warnings to communities through such means as the emergency broadcasters, websites, social media channels, the FireReady mobile application, the Victorian Bushfire Information Line and the national Emergency Alert telephone warning system. This messaging also supports community liaison, community meetings, and direct media engagement. Advice and warnings are issued to communities in the path of, or likely to be affected by, a fire or incident. The naming of advices and warnings is based upon the communities likely to be affected and not upon the fire or incident itself. Where multiple fires occur in a single area, a single message to multiple communities may encompass more than one fire, hazard or emergency activity.
151. A comprehensive range of general communications was delivered to Victorians before, during and after the weekend of 8 and 9 February 2014 through such means as press conferences, media releases, emergency warning broadcasts, paid advertisements, videos on youtube.com and social media (including Facebook and Twitter). The key messages included:
- 151.1 Health advice focusing on heatwaves;
  - 151.2 Warnings about the extreme weather conditions;
  - 151.3 Advice to have emergency plans in place; and
  - 151.4 Information about the fire danger.
152. I am informed that 151 advice and warning messages were issued to local communities in the Morwell area between 7 February and 1 April 2014.
153. In relation to the initial stages of the Hernes Oak fire, 22 advice and warning messages were issued to the areas of Hernes Oak, Yallourn, Yallourn Heights, Yallourn North and Newborough between 15:42 on Friday, 7 February 2014 and 09:00 on 9 February 2014. Eleven Advice messages and seven Watch and Act warnings were issued. Four Emergency Warnings were issued on 7 February 2014 in relation to this fire, three of which were accompanied by the Standard Emergency Warning Signal (a siren sound played over the radio or television, before an

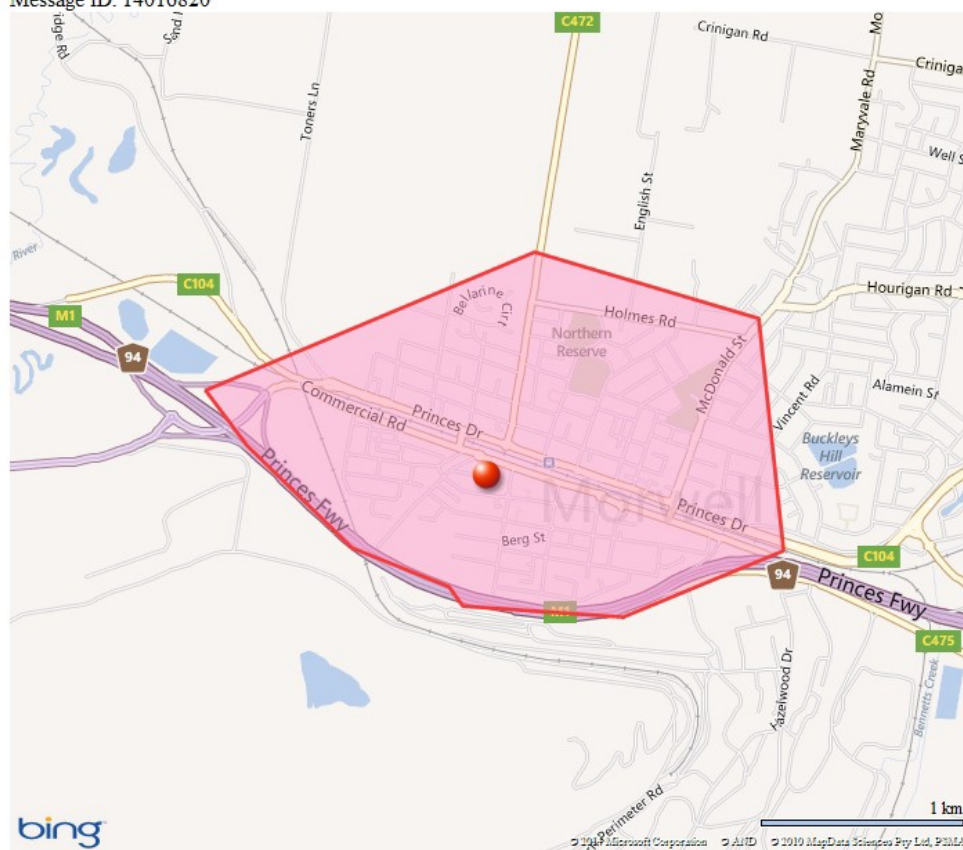
emergency warning is broadcast) for the areas of Hernes Oak, Yallourn, Yallourn North and Newborough in relation to this fire.

154. At 23:31 on 8 February 2014, a Watch and Act message was issued to the Hernes Oak community that the predicted severe weather conditions on the following day indicated that this fire could breach containment lines and pose a threat to some areas, especially after the wind change. Watch and Act messages issued at 05:10 and again at 09:51 on 9 February 2014 warned residents who had left the area that they should not return.
155. On 9 February 2014, an Advice message was issued to the Hazelwood Community at 11:13 in relation to the Hernes Oak fire.
156. As the weather deteriorated and fire activity increased after 13:00 on 9 February 2014, including the Hernes Oak fire and new outbreaks at Driffield, a series of messages regarding that activity were issued to a number of communities in the Morwell area, including Driffield, Hernes Oak, Hazelwood and Glengarry West. This included seven Emergency Warnings to various communities before 23:59 on that day relating to bushfire activity.
157. The initial messaging relating to the Mine fire related to fire activity and the threat this posed to local communities. As the complexity of this incident evolved over the following days and weeks, the messages issued by the fire agencies incorporated a suite of information including smoke impacts, health, relief and recovery provided by a number of agencies and departments. The Advice messages became a vehicle to distribute this information. As the incident progressed, the system was used to provide information from other departments and agencies as well. The first such Advice message was issued at 15:46 on 17 February 2014 relating to smoke impacts, issued by the Department of Health (DH). Attached is a copy of the Advice message issued at 15:46 on 17 February 2014 ([IFSC.0007.001.0210](#)).
158. While advice and warnings were issued locally, the SCC media team supported the initial communications and continued to create and distribute information (based on information from the ICC) to major stakeholders, metropolitan media and social media for the duration of this incident. In the days that followed, across Victoria hundreds of fires were active, including several in the Gippsland region. As a result, there was significant smoke haze across many parts of Victoria. Warnings regarding smoke haze were released from the SCC on Tuesday, 11 February 2014. It was apparent that the smoke and ash emanating from the mine and the CO levels were critical community issues. There was a necessary shift in the agency responses to direct community engagement, support and information.
159. In order to support the development of strategic approach to communications, a Media Officer tasked with providing support and writing a communications strategy for the Mine fire was deployed from the SCC to the Hazelwood ICC. On Wednesday, 12 February 2014 in support of the Public Information Officer (PIO) at the Hazelwood ICC. The Media Officer was relocated to Traralgon RCC on Thursday, 13 February to work on organising a public meeting in Morwell for the following afternoon.
160. On Thursday evening, a senior Media Officer arrived at Traralgon RCC tasked with clarifying communication roles (as there were now three separate groups of Public Information Units working on the Mine communications) and creating a regional/state level communications strategy. On Friday, 14 February 2014, a senior

CFA community engagement advisor arrived with an experienced PIO at the Traralgon RCC.

161. The first of a number of community meetings was held at Kernot Hall in Morwell on the evening of Friday, 14 February 2014 and led by the IC. Representatives from CFA, MFB, DH, Environment Protection Authority (EPA) and Latrobe City Council addressed the meeting. Representatives from VicRoads and Victoria Police were also in attendance and questions were taken from the floor. Topics included:
- 161.1 The fire fighting situation (which included advice to the community that this would be a protracted incident);
  - 161.2 Air quality and testing and quality; and
  - 161.3 The impact of smoke on public health and how to limit risk.
162. On Saturday, 15 February, 2014, the fire services issued a Watch and Act warning to the Morwell community referencing elevated levels of CO and advising residents in an area of south-western Morwell to 'shelter in place'. The national Emergency Alert telephone alerting system developed after the 2009 bushfires was used to alert more than 26,000 fixed and mobile telephone subscribers within or passing through the area. Please see the following map which depicts the footprint of the area to which the message was sent:

Message ID: 14016820



163. The warning was later downgraded to an 'Advice' message. However, community members remained concerned about CO within their community.

164. On Sunday, 16 February 2014, a copy of the draft 'Communications and Stakeholder Engagement Strategy' was provided to the FSC and key ICC and RCC leadership teams.
165. On Tuesday, 18 February, 2014 the second community meeting for the open cut mine fires was held from 6pm at Kernot Hall, at the corner of Princes Drive and Monash Way, Morwell
166. The meeting was a further opportunity for Morwell residents to hear from the CFA about the ongoing fire emergencies and included representatives from Latrobe City, the EPA and DH to answer questions about smoke and health impacts. This meeting was a turning point and highlighted to the emergency management agencies the depth of concern within the Morwell community about the mine fire and the potential effects of the smoke.
167. The development of a strategic approach to community engagement in relation to the mine fire was developed at a Regional level and fed into the State level planning process. From 20 February 2014 onwards, this approach is reflected in the 'Communications and Stakeholder Engagement Strategy' documents incorporated into the State Strategic Support Team briefs. Copies of the iterations of this strategy are incorporated into the 'Latrobe Valley Hazmat/Fire Plan' referred to in response to question 9 (see paragraph 115).
168. In the Communications and Stakeholder Engagement Strategy referenced on 24 February 2014, the communications principles outlined included:
- 168.1 To ensure that community messaging remains consistent and keeping with the 'Timely, Tailored and Relevant' approach, the following strategies will apply to all Public Information Gippsland:
- 168.2 'If you know it, tell the community' should be the approach for communication at all times;
- 168.3 Ensure internal as well as external communication is maintained at all times;
- 168.4 Target communication to individual communities needs and structures;
- 168.5 The ICCs will utilise the systems available to them to ensure that appropriate warnings will be issued including text messages, social media and pre-recorded phone calls;
- 168.6 Ask the community how best to engage with them;
- 168.7 Where possible utilise local people to engage with local people;
- 168.8 Consult with relief and recovery agencies when developing messages to support relief and recovery efforts; and
- 168.9 Incident Management Teams will utilise all available technology and local contacts to alert relevant communities in the event that the risk increases.
169. A range of key communications (eg media releases, community newsletters) were developed to assist in community engagement during the Mine fire. Due to the size

and volume of these documents, copies of these communications issued from 7 February 2014 to 1 April 2014 will be separately provided to the Board.

***Question 15 — Provide your views on what worked well, what did not work well and what could have been done better in relation to communications with the public about the fires at the Mine in February and March 2014.***

170. The following things worked well:

- 170.1 Warnings system – The use of the warning system to warn communities of fire progress including the use of the FireReady mobile phone application and telephone alerting system. The Advice, Watch & Act and emergency warnings were issued from the IC using all the available communications methods used for emergencies.
- 170.2 People-to-people contact – The deployment of the CFA lead community information teams and the highly visible ‘bushfire buses’ worked well in the first week of the incident. However, later in the incident these techniques were unable to provide the health or environmental information the community was seeking. The deployment of fire public information officers and paramedics to conduct street-based information sessions in the second week assisted in getting information into the local communities with authority.
- 170.3 Contact points – Health assessment centre became a focal point for disseminating information. The Health Assessment Centre was extremely effective and valued by those community members who attended. The one-on-one assessment carried out by nurses and or paramedics was very successful.
- 170.4 Contact points – Health assessment centre became a focal point for disseminating information.
- 170.5 Local business – Engaging with local business owners proved to be another focal point for disseminating information.
- 170.6 Schools – The focus on engagement with schools in the area also proved to be an effective mechanism for informing the community.

171. One thing that did not work well initially was making use of established local community engagement structures and networks. This was a lesson learned for us.

172. Things that could have been done better:

- 172.1 Messaging content – Messaging that better integrates fire health and environmental information is required.
- 172.2 Messaging style – Information must be distributed to match the profile and technology use of a community. Not all community members, for example, are connected to the Internet. More traditional methods of letterboxing remain effective.
- 172.3 Community connection – A community engagement process that is better connects to the demographic and community profile. Communications must also take into account factors such as literacy. Developing a community

engagement model and engaging with communities prior to the incident is important. Engaging with and utilising the local established so-called 'trusted networks' is an important strategy that will require some development.

## E. Preparedness

**Question 16 — State the steps taken by the fire services prior to 9 February 2014 to ensure that both volunteer and career fire fighters had the capability to respond to a brown coal fire in an open cut mine.**

173. Before 2014, there have been four major fires in brown coal mines in Victoria, being in 1944 at Yallourn and, in 1977, 2006 and 2008 at Morwell. Three of these have been the subject of substantive analysis.
174. There was a fire at the Yallourn open cut mine in 1944 which was the subject of the *Report of the Royal Commission into the Fire at Yallourn on 14 February 1944* (**Yallourn Report**). According to the findings set out in the Yallourn Report, the fire in the mine was caused by a fire on a neighbouring farm spreading into the mine. The fire occurred in/near the mine work (ie the working face of the mine). The Yallourn Report found that there was no general plan in place to protect the mine works and there was confusion as to who was responsible for fire prevention and suppression within the mine. It also found that the water pressure in the mine reticulation system was inadequate and that the pipe for that system were too far away from the workface to provide effective protection. Attached is a copy of the Yallourn Report ([\[VGSO.0002.001.0398\]](#)).
175. The 1977 fire occurred at the Morwell open cut mine (now known as Hazelwood). The circumstances of this fire are summarised in the *Report to Country Fire Authority — The Morwell Open-Cut Mine Fire 12-19 October, 2006* (**2006 Report**).<sup>2</sup> That fire ignited on 4 November 1977 and lasted two days. The fire occurred in or close the working face. A review committee convened to determine the causes of the fire found that the fire was caused by a vehicle driving over the coal level. There were issues identified with pipe reticulation not keeping progress with the face of the mine, in part, because of a period of strikes and work bans that occurred in mid-1977. Attached is a copy of the 2006 Report ([\[CFA.0005.001.0209\]](#)).
176. In 2006, a fire occurred at the Morwell open cut mine outside the bushfire season. The fire ignited on 12 October 2006, most probably as a result of a faulty conveyor belt. The fire lasted until 19 October 2006. I was then Deputy Chief Officer of CFA at the time this fire occurred and was both present at the mine and active in developing the fire response from the first day of the fire. This fire was the subject of a number of reports, including the 2006 Report and a report commissioned by the mine operator, *International Power Hazelwood — October 2006 Mine Fire Investigation — Incident Investigation Report* (**GHD Report**). The GHD Report and its findings are discussed in the 2006 Report. Notably, the GHD Report found that contributing factors included the fact the fire had escalated by the time the fire had been reported to CFA and CFA assets could be deployed and that there was no formalised arrangements with CFA to be put on alert for a fire.<sup>3</sup> Attached is a copy of the GHD Report ([\[CFA.0003.001.0067\]](#)). The 2006 Report found that winding tracks in the mine impeded CFA deployment as did the steep batters.<sup>4</sup> Water in the

<sup>2</sup> See 2006 Report, 9 and Appendix A.

<sup>3</sup> Ibid 8 (discussing GHD Report).

<sup>4</sup> Ibid 11.

mine impeded the movement of fire fighters and appliances.<sup>5</sup> On the first day of the fire, the water supply from the mine to the upper half of the mine failed.<sup>6</sup> The weather worsened on later days of the fire with some fire fighters becoming hypothermic. Excess water continued to present issues, including to the safety of fire fighters. Among other things, the 2006 Report identified a need for effective pre-planning and also found there was a need for the risks of exposure to CO to be managed, including by monitoring and the use of breathing apparatuses. The 2006 Report concluded with the following passage:

The conundrum that faces both the manager of the three mines and the Country Fire Authority is that while the extreme fire danger from igniting brown coal is recognized [sic], the rarity of major fires inevitably leads to a sense of complacency and a reluctance to involve outsiders.

Unless a major improvement in cooperation and openness between the mines (especially the Morwell mine) with Country Fire Authority occurs with regular meetings, joint training and exercises, it is likely an event with the severity of the October, 2006 fire will be repeated.<sup>7</sup>

177. The 2014 Mine fire differs somewhat from the three fires dealt with in the reviews above. All affected the working face of the relevant mine. In contrast, the Mine fire in 2014 spread into the non-working parts of the Mine and not the working face. In this sense, the circumstances of the fires and the findings in relation to water reticulation were somewhat different. While water reticulation was flagged as an issue in previous mine fires, those fires were ones on the working face of the relevant mine, as opposed to non-operational areas of the mine. There was no reticulated water in the non-operational batters.
178. Regarding water reticulation generally, I note the 2006 Report rightly identified complex issues in relation to the deployment of water in mine fires. Excess water can have a negative effect of the hydrogeology in mines. This can operate to destabilise batters and hamper the ability of appliances and personnel to move across the mine area. This becomes a workplace safety issues for fire fighters. It can also hamper the ability of fire services to fight a fire. In this sense, it is not the case that a mine fire is best fought by putting a maximum quantity of water on it.
179. I understand that the working face and conveyor area of the Mine had a fully charged and operating water reticulation system in place at the time of the 9 February 2014 fire. The non-working areas of the mine had some degree of water reticulation infrastructure in place, however not all of this infrastructure was fully operational when the fire first started.
180. I am also informed that since 2006, CFA and the Mine operator have considerably enhanced the frequency of meetings and joint training. There have also been joint exercises undertaken by them. I also understand that a number of CFA volunteers are employees of the Mine operator which has further facilitated this knowledge sharing.
181. The three open cut coal mines in the Latrobe Valley are located in the Yallourn North, Morwell and Traralgon fire brigade districts. These three fire brigades have the responsibility to operate under Standard Operating Procedures (SOPs) and as part of their Brigade preparedness program have a training and exercise program that includes the power generators and coal mines.

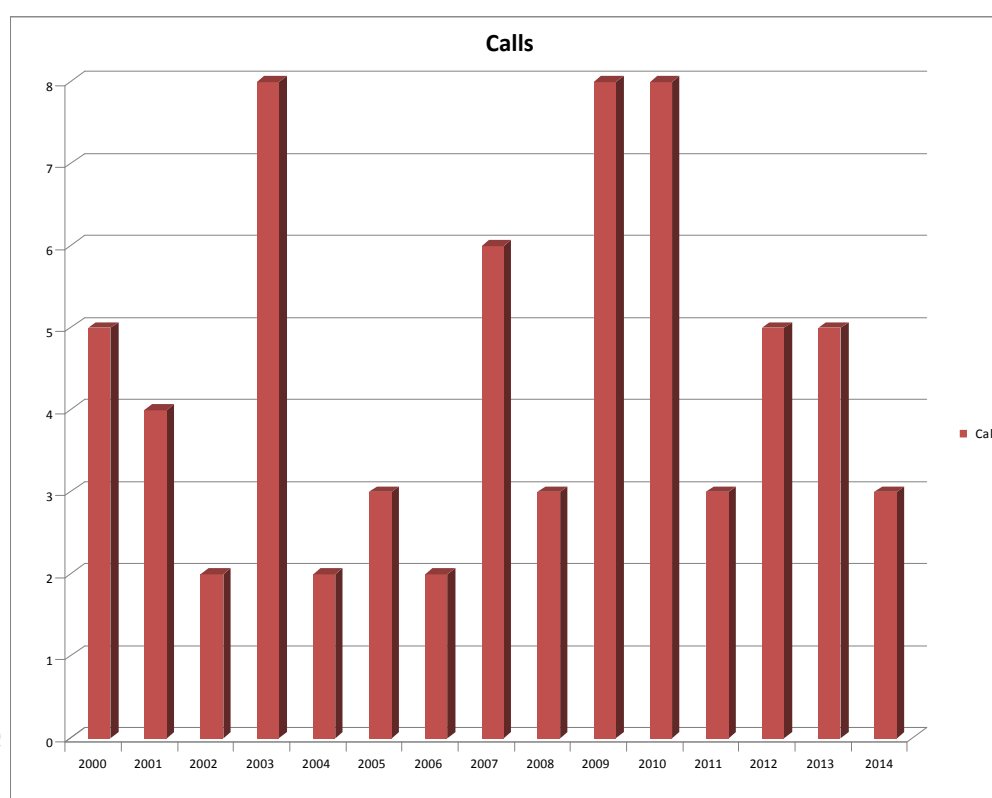
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<sup>5</sup> Ibid 12.

<sup>6</sup> Ibid 16.

<sup>7</sup> Ibid 32.

182. The local fire fighting capability is, however, broader than the three primary brigades. There are support (escalation) plans that include neighbouring brigades including Churchill and Moe, along with support from the three CFA Groups of brigades at Traralgon, Morwell and Narracan, which have coordination responsibilities.
183. Volunteer and paid career fire fighters train according to the risk within their area of responsibility, which in the Latrobe Valley includes the power generation industry and coal mines. Those volunteer fire fighters who work within the industry have enhanced knowledge of the power and coal industry and have technical knowledge of coal mine operations.
184. The Morwell and Traralgon CFA fire brigades have both paid career and volunteer fire fighters. Yallourn North and the other support brigades within the Latrobe Valley are wholly volunteer Brigades. The career officers and fire fighters have a key responsibility to work with the power and coal industry to improve planning and response to these major infrastructure facilities.
185. CFA has enhanced fire fighting capability over recent years with government funding for two aerial appliances being allocated to the Latrobe Valley. One of these appliances has been commissioned at Traralgon. A program to refresh and modernise the fire fighting fleet across the Latrobe Valley has already occurred. Additional career fire fighters have been deployed to both Morwell and Traralgon over the last five years.
186. The 000 emergency call taking that fire fighters would previously manage and process prior to responding is now centralised into the Emergency Services Telecommunications Authority central state-wide system therefore resulting in fire fighters responding immediately and improving response times.
187. I understand that site inductions and visits to the Mine by local brigades are conducted on a regular basis. There is also annual training involving the local brigades, Mine staff and contractors. The most recent exercise was conducted in late 2013. A video, 'Brown Coal Firefighter Awareness', was produced some years ago and continues to be used as a training tool.
188. While calls to local brigades to attend the Mine are not uncommon, they are





relatively few in number as the following graph shows: (Source CFA data).

***Question 17 — State what expertise was identified by and available to the fire services, prior to 9 February 2014, in relation to responding to a brown coal fire in an open cut mine.***

189. As noted in my response to question 16, many local CFA volunteers work in this industry. In addition, career staff with long tenure at the two staffed stations have had exposure to mine fires over many years, especially those in the 2006 and 2008.
190. The CFA at a local level has developed strong relationships with the Mine staff and management through the operation of the CGEIG
191. The fire service capability prior to 9 February 2014 was consistent with that in the years 2006 and 2008 and focussed on the use of water and A-class foam. CFA have also worked with the Mine to support them in developing their own fire fighting capability including water monitors fitted to cranes, fixed monitors, water tankers and so on.
192. In relation to the safety of responders, CFA purchased a number of CO detectors and these were allocated to Brigades that respond to the coal mines. These have been regularly used for day-to-day activity, as well as initial response into the coal mines. During the 2006 and 2008 coal mine fires, CFA further developed the testing regime to ensure fire fighters were not exposed to CO at unsafe levels.

***Question 18 — Describe the arrangements that were in place between the CFA and the mine operator as at 9 February 2014 for responding to a fire at the Mine. Did the CFA audit the mine operator's fire mitigation plans at regular intervals? If so, please describe the audit process and provide copies of the most recent plan and audit report.***

193. These arrangements have partly been answered in response to question 7 above.
194. CFA has a SOP, SOP 10.23, in place for responding to coal mine fires. SOP 10.23 outlines in general terms the approach to be taken when responding to fires in such facilities. Attached is a copy of SOP 10.23 ([\[CFA.0002.001.0099\]](#))
195. I understand that the arrangements in place prior to 9 February 2014 include CFA regularly meeting with the Mine operator to discuss emergency management arrangements. Both GDF Suez and CFA are active contributors to the CGEIG. CGEIG meetings have been conducted bi-monthly since the privatisation of the power industry. CFA is also a member of two CGEIG sub-committees for Standardisation and Communications.
196. I understand that late 2013, a tactical exercise without troops was conducted by CGEIG using the scenario of fire entering the site from outside. An annual practical exercise involving CFA and the Mine operator is also conducted.
197. I note that a number of documents exist in relation to the mitigation of fire in the Mine which are held by the Mine operator, but are not publicly available. These include the 'Emergency Response Plan – Mine', 'Mine Fire Service Policy & Code of Practice', the 'Fire Instructions – Mine' and 'Fire Fighting Equipment Annual Inspection'.

198. It is my understanding that that the CFA does not audit the fire mitigation plans. However, the occupational health and safety regulations call upon the CFA to be consulted in the development of the Mine's emergency management plan.

***Question 19 — State the steps that were taken in the week prior to and on 9 February 2014 to prepare for the risk of fire in the Latrobe Valley, at the State, regional and local levels. Include reference to steps that were taken to prepare for the risk that the Hernes Oak fire might spread towards or into the Mine.***

199. This question has been answered, in part, in my response to question 2.
200. Preparedness for the risk of bushfire affecting major infrastructure assets in the Latrobe Valley assets is not necessarily undertaken on a week-by-week basis but is reflected in the work done at the State, regional and local levels.
201. State preparedness considered the major infrastructure in the Latrobe Valley along with the State preparedness. The weekend of the 8 and 9 February 2014 required a State plan for fire fighting resources, additional aircraft and personnel. The readiness plan included heatwave and fire messaging across the state.
202. Regional control was in place and leading the Gippsland Readiness plan which included activating ICCs, pre-positioning strike teams, establishing a human resources plan for the weekend for all agencies.
203. The ICC at Traralgon was tasked to operate from Saturday morning. However, due to the Hernes Oak fire the centre operated from Friday evening onwards. On Saturday morning MFB pumpers stepped up into Traralgon and Morwell to provide additional first response capability in the Latrobe Valley. Aircraft were operating from Latrobe Valley and Heyfield and were supplemented once the Hernes Oak fire occurred on Friday afternoon.
204. The CGEIG was briefed as part of the REMT process.
205. On the basis that there was active fire in the vicinity of the Mine, resources were deployed to the Latrobe Valley and positioned to respond rapidly from adjoining regions, bearing in mind other risks confronting the State on 9 February 2014. While the risk of the Hernes Oak fire breaching control lines and burning into the mine has already been noted in this statement, it was one of a number of risks to critical infrastructure in and around Morwell and elsewhere in the Latrobe Valley.

***Question 20 — Provide your views on what worked well, what did not work well and what could have been done better in relation to preparedness for the fires that took hold in the Mine on 9 February 2014.***

206. The following things worked well:
- 206.1 Pre-location of operational resources – MFB pumpers relocating to the Latrobe Valley. This provided additional initial response capability into Traralgon and Morwell fire districts to supplement the existing CFA capacity; and
  - 206.2 The planned deployment and redeployment of fire ground resources on the basis of primacy of life over the protection of property.
207. The following things could have been done better:

- 207.1 Specialist equipment – I believe there is a need to increase the availability of first response equipment in the Latrobe Valley to include CAFS, supplemented by improved detection technology (ie more thermal imaging cameras);
- 207.2 Aircraft – Increased aircraft capability (eg helicopters with large volume buckets); and
- 207.3 First response vehicles – The current capability to provide aerial appliances (elevated nozzles) needs review in order to determine appropriate first response capability from the industry and CFA.

## **F. Prevention**

***Question 21 — Provide an overview of the framework that applied during the 2013-14 fire season for mitigating the fire risk at the Mine, including reference to relevant laws, guidelines and other key documents, and identifying which agencies or bodies were responsible for developing, implementing and overseeing mitigation strategies.***

- 208. I have read the letter from the Victorian Government Solicitor's Office to the Board, dated 22 April 2014, which substantially addresses the matters raised in this question ([\[VGSO.0003.002.0001\]](#)). I adopt the contents of that letter and that represents my understanding of these matters.
- 209. I have some additional understanding of the regulatory framework in relation to mines as a result of from my involvement in the 2006 mine fire in the Latrobe Valley.

***Question 22 — Attach copies of any fire risk assessments for the Latrobe Valley and fire risk management plans for the Latrobe Valley including details of risk mitigation strategies (including fuel management plans) that applied during 2013 and the 2013-14 fire season.***

- 210. The Gippsland Regional Strategic Fire Management Plan has been developed and implemented for the Gippsland area. It incorporates information regarding fire history, assets at risk and current controls. It categorises the Hazelwood Power Station as an extreme risk. Attached is a copy of the Gippsland Regional Strategic Fire Management Plan ([\[FSC.0008.002.0001\]](#)).
- 211. The Latrobe City Fire Management Planning Committee has developed a municipal fire management plan for its municipal district. This plan also includes fire history information, assets at risk and control measures. Attached is a copy of the Latrobe City Fire Management Plan 2013-2016 ([\[FSC.0006.010.0050\]](#)).
- 212. Both these plans consider planning for fire across their geographic footprints, have included multiple stakeholders and detail a range of fire mitigation activities and bodies accountable for delivering those activities. These plans also draw linkages to other specific plans including agency and mine mitigation, response and recovery plans ranging from government agencies, catchment management authorities and major essential service providers/sites including the coal mines.

***Question 23 — Outline the respective roles and responsibilities of the CFA, Latrobe City, GDF Suez and any other relevant agency or body in developing and implementing a fire risk mitigation strategy for the Mine.***

- 213. Part 6A of the Emergency Management Manual Victoria (EMMV) contains guidelines to municipal emergency management planning committees by the

Minister . They are published to facilitate the introduction of integrated fire management planning at municipal level, using the provisions of the EM Act, which provides, under s 21(5), that a municipal emergency planning committee must give effect to any direction or guideline issued by the Minister.

214. The integrated fire management planning framework is designed to support the integration, consistency and coordination of the fire management planning activities of government, the fire management sector and communities to achieve effective fire management for the State of Victoria. CFA is an active partner in this risk mitigation process.
215. In relation to municipal councils wholly or partly in the Country Area of Victoria, a municipal fire management plan prepared and endorsed in compliance with these guidelines will be deemed to fulfil s 55A of the *Country Fire Authority Act 1958 (CFA Act)* which requires them to have a municipal fire prevention plan with certain defined contents. I note that, while the CFA Act requires each council in its area to have a municipal fire prevention plan, the appointment of a municipal fire prevention committee (s 54) is at the discretion of CFA and is not mandatory.
216. The municipal fire management plan prepared under these Guidelines will be a sub-plan of the municipal emergency management plan. It may be prepared by the Municipal Emergency Management Planning Committee or a sub-committee (the Municipal Fire Management Planning Committee) appointed for the purpose.
217. Regional Strategic Fire Management Planning Committees have been created under s 9 of the EM Act. Their membership and terms of reference are set out in Part 5 of EMMV. In due course, the CFA Act and the *Metropolitan Fire Brigades Act 1958* may be amended to provide a specific statutory requirement for municipal fire management planning across the State.
218. I understand that there is a requirement under the *Occupational Health and Safety Regulations 2007* for mine operators to prepare an emergency management plan. The regulations stipulate that this plan should be prepared in conjunction with the municipal council and emergency services with responsibility for where the mine is located. It requires the plan to include 'major mining hazards that could detrimentally affect the health or safety of people in the area surrounding the mine'.
219. In addition, mine operators are required to comply with a range of differing legislative planning requirements as well as the *Electricity Safety (Bushfire Mitigation) Regulations 2013*, focussing on mitigation of bushfire risk mitigation, and the *Essential Services Act 1958*, focussing on security and service continuity and Part 6 of the *Terrorism (Community Protection) Act 2003*.

***Question 24 — Describe the process you have initiated to review the extent and efficacy of existing fire risk mitigation measures in relation to the open cut coal mines in the Latrobe Valley, and state the outcomes of this process to date.***

220. I initiated a working group with representatives of all of the Latrobe Valley coal mines in order to better understand the future requirements for open cut coal mine fire management; determine the extent and efficacy of existing planning documents by considering regulations, practice and guides currently used by the industry and emergency services for preventing fires, responding to fires and protection of assets, infrastructure and people; the relevant factors that support or limit fire management; and an appropriate framework for fire management for open cut coal mines.

221. I engaged a consultant, Jeff Floyd, to convene meetings for the working group. The group agreed that it was a forum specifically for the mining sector. The group met on three occasions (being 14, 21 and 28 March 2014). CFA and representation from my office was also involved. All three companies and CFA compiled a list of existing fire mitigation plans.
222. This working group has taken a collaborative approach to reviewing current mitigation planning and identifying areas of improvement including the need to develop a good practice guideline for coal fire management that builds on previous practice to incorporate areas of improvement for both internal and external consequence management.
223. To date the efficacy of these plans is yet to be analysed. The existing individual mine fire mitigation plans focus upon the impacts within the mine perimeter with regard being given to business continuity. There is a need for improved planning to mitigate external fire impacts into the mine sites and also impacts of fires originating from the mine site externally to adjacent land, including fire and smoke. This broader landscape planning needs to be incorporated as part of the current multi-stakeholder fire management planning regime at municipal and regional levels.
224. There is currently no good practice guideline in place. In my view the development of such a guideline requires commitment from each mine company and the fire services to provide a senior technical officer to establish a tasked writing team. The guideline should also consider all hazards, not just fire. Successive drafts of the guideline could be reviewed by the working group under an independent chair. These could or should both inform and be informed by the Board. There is currently no industry good practice guideline to inform the industry.
225. In my view, a performance assurance process should also be developed to ensure application of the guideline and provide exercises involving various scenarios such as internal and external sources of fire and other emergency risks. In addition to the guideline in my view, the following additional activities should also be undertaken:
- 225.1 Review of the Latrobe City Municipal Emergency Management Plan to consider the inclusion of sub-plan for major smoke hazards including a community resilience plan focussed directly on building the resilience of community members and assets to a prolonged intense smoke event;
  - 225.2 Develop smoke plume modelling from different parts of each mine to inform likely community impact;
  - 225.3 Review of the rehabilitation regimes in and adjacent to each mine site for mitigating fire entering or leaving the mine sites; and
  - 225.4 Initiate a formal mechanism to ensure transfer of specialist knowledge across both the mine companies and CFA for suppression of coal fires.

***Question 25 — Provide your views on what worked well, what did not work well and what could have been done better in relation to mitigating the risk of the fire at the Mine.***

226. I would make the following general observations in response to the broader question of mitigating the risk of fire in the Mine and its consequences.
227. Consideration must be given to taking further steps in the area of integrated emergency management. The following matters could be considered:

- 227.1 Agency-led incident management that is integrated across the emergency management agencies is well-established and is maturing to be a comprehensive system. The opportunity is to now include in a more formal manner the industry into the incident management system. The inclusion of the industry is a critical step to more effectively manage an incident with the industry technical knowledge, resources and operational knowledge of the site and/or hazard. The incident management system may require amendment to cater for industry. However, there should be a shared obligation approach to mandate and encourage the inclusion of industry in incident management teams.
- 227.2 Increased engagement by the coal industry with other key stakeholders including the community, in clarifying roles and responsibilities for activities before, during and after fire events, including secondary impacts such as smoke emissions, is a critical path forward to improving outcomes for all involved.
- 227.3 This approach needs to be transparent and provide a landscape perspective for all stakeholders to understand risks and mitigate impacts from environments both internal and external to the mine incorporating an all hazard approach. Training (including induction training) and exercising realistic scenarios provide the opportunity to test and refine mitigation, response and recovery activities and improve preparedness for actual events.
- 227.4 In addition to the current arrangements described above, through the creation of EMV, the State has committed to wide-ranging reform of Victoria's emergency management arrangements. As part of this exercise, emergency management planning arrangements will be examined with a view to making them holistic and coordinated and to allocate specific accountabilities for risk management and mitigation in relation to particular hazards. Further legislative reforms are under development to enable improved all hazard planning across government, business, industry and the community for Victoria.
- 227.5 There is a need to support a more collaborative, all hazards approach to mitigation planning within the Mine and across the adjoining landscape. An objective party, such as the EMC, can provide the environment through EMV to support a more inclusive and comprehensive planning approach. This would achieve a greater focus on consequence management, from the well-being of community to the continuity of this essential service. It also provides the basis for testing the efficacy of planning.
- 227.6 Similarly, initial discussions with the mining sector have revealed the need for clarity on the appropriate government department to act as a co-ordinating broker when the mine operators are faced with competing demands from the various regulators. One example of this type of challenge is the introduction of vegetation to reduce dust emissions, which in turn can contribute to the increased threat of fire.
- 227.7 Emergency management planning has evolved with integrated plans for fire management plans in private and public land management. However, this integrated approach has not addressed the interface and integration of major hazards or special hazards that would result in integrated emergency planning for facilities like the Hazelwood mine.

228. Consideration should be given to utilising and/or acquiring new technology in the area of fire detection and fire response. The evolution of technology can allow for new ways to detect and respond to fires. It is necessary to ensure that equipment under consideration for procurement and/or in use reflects this evolution, provided that there is a proven need for it and the equipment has been proven to be operationally effective. The opportunity exists to introduce:
- 228.1 Thermal detection and other imaging technologies that provide a technology solution to detection of fire and hot spots and that can be communicated on the fire ground in a timely and useful manner;
  - 228.2 CAFS that are capable to operate in an open cut mine environment and is supported by camera technologies that improve the effectiveness of foam and other suppression methods; and
  - 228.3 Aviation plans that include the type of aircraft and water bombing techniques that operate successfully in brown coal and in an open cut environment.
229. There is a need to for an enhanced level community engagement. Where appropriate, this should utilise existing well-established local networks during an emergency to ensure that the community is properly engaged and that communications and messaging is being received and understood. These trusted networks are established with strong local leaders that include business, schools, recreation and other community focused groups. During the Hazelwood Coal Mine fire some of these trusted networks were engaged. This proved to be very effective. This is an opportunity to model and develop a sustainable system approach, for use in emergencies generally, that would operate before during and after an emergency without the need to build new networks in a time of need. This will provide a platform to engage local knowledge in a given emergency.

Dated: 20 May 2014

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**CRAIG WILLIAM LAPSLEY**