IN THE MATTER OF The Hazelwood Coal Mine Fire Inquiry

WITNESS STATEMENT RODERICK JAMES (JAMIE) MACKENZIE

Date of Document: 16 July 2015

Filed on behalf of: The State of Victoria

Prepared by:

Victorian Government Solicitor

Level 25

Attention: Peter Stewart

121 Exhibition Street Melbourne VIC 3000

I, RODERICK JAMES (JAMIE) MACKENZIE, c/- Anglesea CFA, Great Ocean Road, Anglesea, Victoria, Senior Instructor – Wildfire/Leadership Development and Anglesea volunteer, Country Fire Authority (**CFA**), can say as follows:

Introduction

- 1. My full name is Roderick James Mackenzie. **Attachment A** to this statement is a copy of my curriculum vitae.
- 2. I have been involved in matters of fire management and suppression both in and around the town of Anglesea and more broadly for more than 30 years.
- 3. My relevant experience began in 1983 when I became a seasonal firefighter and later a Forest Officer and Ranger with what is now known as the Department of Environment, Land, Water and Planning (**DELWP**). During my employment with DELWP I held various roles including that of Senior Ranger and Assistant Chief Ranger, and I was responsible for the management of the East Otway region. This included management of the area around the Anglesea Mine (known as the Alcoa Lease Area) for biodiversity and fire management. It also included planning and implementing fuel reduction plans for the East Otways and Alcoa Lease Area.
- 4. Between 1995 and 2001 I was a self-employed Environmental Education and Wildfire Training Consultant.

- 5. Since 2001 I have been employed by the CFA. My employment with the CFA has included my current role as a Senior Instructor Wildfire/Leadership Development.
- 6. In addition to my employment, I have also been a volunteer at the CFA Anglesea Brigade since 1991. I have held various volunteer roles which are described in **Attachment A**. Currently, my volunteer position is that of Deputy Group Officer for the Coastal Group responsible for Community Safety.
- 7. I have been shown a copy of a letter from the solicitors to the Inquiry to the Victorian Government Solicitor, **Attachment B** (letter). The letter requests information from the CFA in relation to the coal mine located close to the town of Anglesea (**Anglesea Mine**). In particular, it refers to paragraph 11 of the Inquiry's terms of reference, namely:

"sustainable, practical and effective options that could be undertaken by the mine operator to decrease the risk of fire arising from or impacting the Anglesea Mine for the 2015/2016 summer season, noting the impending closure of the [Anglesea Mine] on 31 August 2015."

8. In that context, the letter sets out eight separate questions which are relevant to the Inquiry's terms of reference. In this witness statement, I address the questions numbered 1-3. Another CFA officer, Bob Barry, will address the questions numbered 4-8.

Ouestion 1 – Briefly describe your role at the Anglesea CFA Brigade.

- 9. My role both at the Anglesea Brigade and more generally is summarised in **Attachment A**. I was first employed by the CFA in 2001. As set out above, my current role is a Senior Instructor Wildlife/Leadership Development.
- 10. My involvement with the Anglesea CFA Brigade predates my formal employment. I commenced as a volunteer in or around 1991. My current volunteer position is that of Deputy Group Officer for the Coastal Group responsible for Community Safety.
- 11. Most relevantly for the purpose of the term of reference, the previous roles I have held at DELWP, as a consultant and as both an employee and volunteer with the CFA Anglesea Brigade has involved:
 - 11.1 attending numerous fire events and other emergencies in and around Anglesea over approximately 30 years;

- managing the East Otways, including management of the Alcoa Lease Area for biodiversity and fire management;
- 11.3 prescribed burning with DELWP as a mentor, burn Officer In Charge (OIC) and sector commander;
- 11.4 prescribed burning for the Anglesea CFA Brigade, Coastal group and for Surfcoast Shire;
- 11.5 developing and conducting Community Safety sessions for public;
- developing the Anglesea Fire Education program with the Anglesea Primary School and University of Melbourne;
- 11.7 being a member of the team that developed the first Township Protection Plan for the town of Anglesea. This plan was subsequently used as a basis for developing similar plans for other communities throughout Victoria;
- 11.8 running numerous emergency scenarios for the community and other emergency services.

Question 2 – What is your experience of attending fires at the Anglesea Mine?

- 12. To my knowledge, there has never been a mine fire at the Anglesea Mine. The fire events that have occurred inside the Anglesea Mine have been of a limited nature and related to events such as the electrical fault that occurred in 26 February 2012 and the equipment fire that occurred on 7 July 2013. Otherwise, the only other fire event which had the potential to burn into the Anglesea Mine was an escaped planned burn which occurred on 28 March 2009. This planned burn was quickly brought under control before it had any impact on the Anglesea Mine.
- 13. Extracts from the CFA's Incident Management System database are documents

 Attachment C to Attachment I. These documents include the "IPS Event List"

 which records every fire event recorded as having occurred in the vicinity of Coal

 Mine Road in Anglesea between August 1998 and January 2015, and confirm that
 there has not been a mine fire within the Anglesea Mine.
- 14. The fact that there has not been a mine fire within the Anglesea Mine is unsurprising.

 The approach which has been taken to the operation of the Anglesea Mine has been to reclaim the areas that are mined, once the mining of those areas is complete. That

process of reclaiming means that there are not large areas of uncovered batters as there are in other coal mines. Furthermore, vegetation is slow to recover in the areas that are reclaimed, and the vegetation that does regrow does not provide a significant fuel load. Accordingly, there are not large areas of vegetation within the Anglesea Mine that are likely to cause a fire to develop and spread. Instead, the Anglesea Mine largely consists of areas of earth and vegetation which are likely to form a barrier between the town of Anglesea and the surrounding Anglesea Heath. In this way, the Anglesea Mine is considered an important barrier or fire break for the Anglesea community.

- 15. This concept of the mine being a fire break is consistent with the phoenix fire modelling which I observed when it was demonstrated recently to the Anglesea community. The modelling demonstrated that the areas in and around the Anglesea Mine are lower risk than other areas around Anglesea. For that reason, it appears that the effect of the Anglesea Mine is to slow an approaching fire front.
- 16. It is also consistent with what I understand to have been the experience in Anglesea of the fire behaviour on Ash Wednesday. In that regard, I believe that the town of Anglesea was impacted during the Ash Wednesday bushfires after the wind change and as such the fire front approached the town from the south-west. That fire front consisted of significant ember attacks. The ember attacks had a devastating impact on the town of Anglesea, yet my understanding from those who were in Anglesea at the time is that there was no significant fire event inside the Anglesea Mine, notwithstanding it was subject to the same ember attacks.

Question 3 – What is your experience of attending fires in the Anglesea Heath?

- 17. My experience of attending fires in the Anglesea Heath arises in the context of planned burns, minor fires and the fire started by lightning in 2003. As a result of that experience, I am aware that one of the major risks arising from fires within the Anglesea Heath are peat fires. Whilst this risk exists, it is being managed through the planned burning regime that is in place and experience and understanding of local firefighter crews.
- 18. The regime is extensive and, presently, any fire that could impact the Anglesea Heath would first burn through an area that has been fuel managed.

The relevance of the Anglesea Mine and the Anglesea Heath to the broader Anglesea bushfire environment

- 19. Notwithstanding the extensive approach to fuel management in the Heath and the particular considerations relevant to the Anglesea Mine referred to above, the risk presented to the community of Anglesea by reason of its location and the presence of both the Heath and the Anglesea Mine remains significant.
- 20. The Heath and the Anglesea Mine are integral parts of the bushfire landscape for the Anglesea community and it is not possible to treat the risks associated with either the Mine or the Heath independently of the wider risks in the landscape. For that reason, Anglesea CFA has developed an integrated and proactive response to bushfire management for the Anglesea community. This integrated and proactive response is designed to take account of all known risks, including the risks associated with the Heath, the Anglesea Mine and now the impending closure of the Anglesea Mine.
- 21. In that context there are two particular examples of this integrated and proactive approach that are relevant to the Inquiry to the extent that they are both designed to improve the Anglesea CFA's ability to assist the community in the event of a bushfire and, at the same time, recognise the importance of both the Anglesea Mine and the Heath to that broader context.
- 22. First, the approach the Brigade has taken to the issue of traffic management and its impact on both the movement of firefighting resources and obtaining accurate information from the fire ground. In relation to that issue, the single road in and out of Anglesea as well as the congestion on that road during fire season means that it is, at times, impossible to move firefighting appliances and ground observers to the locations they are needed most. That includes moving appliances from the Anglesea fire station to the Anglesea Mine and to the Heath. The only secondary means of moving traffic in or out of Anglesea being Coal Mine Road which is not an appropriate road for the movement of traffic during a fire event. The location of Coal Mine road is depicted on the aerial image which is **Attachment J** to this statement.
- As a result of this, the Anglesea CFA has developed a satellite station on Harvey Street in Anglesea. As is evident from the aerial image which is **Attachment J** to this statement, Harvey Street is at the other end of the town from the Anglesea fire station (the satellite station being at the western end of the town and the main station being eastern end on the Great Ocean Road). This satellite station allows the Brigade to preposition an appliance in a way which is designed to alleviate, as far as is possible, the traffic management issues which are relevant in the town insofar as they may

- prevent the Brigade from responding to a fire. That, of course, includes the Brigade's ability to respond to fires in the Anglesea Mine and the Heath.
- 24. This arrangement will shortly come to an end as the satellite station is located on land that is owned by Barwon Water. A change in circumstances for Barwon Water means that a new site will need to be found for the Anglesea CFA satellite station. In the absence of a new location, the ability of the Anglesea CFA to respond to bushfire events and fires in the Anglesea Mine may be compromised by the traffic management issues which exist in the town. The Anglesea CFA is seeking to find a solution to this issue through attempting to find another location for the satellite station.
- 25. Secondly there is the approach the Brigade has taken to educating children in Anglesea in relation to the risk of fire and in particular bushfire. This education includes the relevance of both the Anglesea Mine and the Heath to that risk.
- As there is a degree of inevitability about fire events in Anglesea, the Anglesea CFA in conjunction with the University of Melbourne and the Anglesea primary school has developed a program for educating year five and six students about fire behaviour. This program uses the current curriculum, particularly in the areas of science, mathematics and geography as a basis for teaching the students about fire behaviour. At the conclusion of the two-year program the students have developed knowledge which is similar to that of a CFA sector commander.
- 27. Through this program, students learn how to plot the location of a fire on a map and, using a device called a McArthur metre, are able to make an assessment of the direction in which a fire is travelling and when it is likely that the fire will reach a particular location. The presence of both the Anglesea Mine and the Heath and their relevance for the purpose of the fire risk to Anglesea forms part of this education program.
- 28. Consistent with the phoenix modelling which has been undertaken in relation to Anglesea, the students understand that the presence of the Anglesea Mine is likely to slow the progress of a fire approaching Anglesea, particularly a fire which is approaching the town from the northwest. Equally, however, the students understand that the fire risk to Anglesea remains significant, regardless of the presence of the Anglesea Mine and the fuel management work that has and will continue to be undertaken in the Heath and in other areas.

7

29. By educating our primary school students in this way the Anglesea CFA has sought to equip the children of the town with skills that could one day save their lives and those of their families. This program culminates in year 5 by students presenting what they have learned to their parents and other Anglesea residents. In year 6 it culminates with the Anglesea students presenting to other schools in the surf coast area.

Dated:	July 2015
Daicu.	July 2013

••••••••••••••••••••••••••••••••••••

RODERICK JAMES MCKENZIE

List of Attachments

- Attachment A Curriculum Vitae of Roderick James (Jamie) MacKenzie
 [VGSO.1001.001.0009]
- 2. Attachment B Letter from the solicitors to the Inquiry to the Victorian Government Solicitor [VGS.1001.001.0013]
- 3. Attachment C CFA's Incident Management System database document [VGSO.1001.001.0015]
- 4. Attachment D CFA's Incident Management System database document [VGSO.1001.001.0021]
- 5. Attachment E CFA's Incident Management System database document [VGSO.1001.001.0023]
- 6. Attachment F CFA's Incident Management System database document [VGSO.1001.001.0026]
- 7. Attachment G CFA's Incident Management System database document [VGSO.1001.001.0028]
- 8. Attachment H CFA's Incident Management System database document [VGSO.1001.001.0034]
- 9. Attachment I CFA's Incident Management System database document [VGSO.1001.001.0037]
- 10. Attachment J Aerial image of location of Coal Mine road [VGSO.1001.001.0038]