IN THE MATTER OF The Hazelwood Coal Mine Fire Inquiry

STATEMENT OF ROBERT JAMES KELLY

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Filed on behalf of: The State of Victoria

Prepared by:

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Attention: Andrew Suddick

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I, Robert James Kelly, of 222 Exhibition Street, Melbourne, Victoria, Acting Director of the Hazardous Industries Group at WorkSafe Victoria (**WorkSafe**), can say as follows:

Introduction

- 1. My full name is Robert James Kelly. My professional address is 222 Exhibition Street, Melbourne, Victoria.
- 2. I am the Acting Director of the Hazardous Industries Group at WorkSafe Victoria (WorkSafe) based in Melbourne.
- 3. I have been in this role since 13 February 2015 and my primary responsibilities include:
 - Leading and managing the Hazardous Industries Group.
 - Ensuring technical services are provided to support WorkSafe's statutory and regulatory functions especially within the areas of Major Hazards, Earth Resources, Agriculture and Construction.
 - Contributing actively and positively to the strategic planning process, including the development of strategy, policy, and resource planning to improve capability and improve service delivery.
 - Seeking out, developing and maintaining constructive relationships with key internal and external stakeholders.
 - Financial management.

- 4. Prior to my role as Acting Director, I was the Manager of the Earth Resources Practice (**ERP**) in the Hazardous Industries Group at WorkSafe. I was in this role since July 2011.
- 5. I have completed a Bachelor of Engineering (Civil) majoring in Infrastructure Management. I have also completed a Diploma of Civil Engineering, Diploma of Business (Frontline Management), Diploma of Government (Workplace Inspection) and a Lead Auditor (Safety Management Systems) certification.
- 6. I commenced employment with WorkSafe in June 2002 in the position of Technical Inspector in the Major Hazards Unit. During my time at WorkSafe, I have held various other positions, mostly in the Hazardous Industries Group, including as a Senior Inspector, Group Leader, Manager and Senior Mining Analyst.
- 7. Prior to commencing employment with WorkSafe I was employed by CSR from 1993 to June 2002. I held a number of positions with CSR including CSR Production Manager at CSR Gyprock and operational and technical positions at CSR Readymix. Prior to my employment with CSR, I worked as a Civil Engineer with the Department of Housing and Construction from September 1989 to November 1991.
- 8. This statement has been prepared pursuant to the request made by Justine Stansen, Principal Legal Advisor on behalf of the Hazelwood Mine Fire Inquiry by letter of 23 June 2015 (Letter of 23 June). A copy of the Letter of 23 June is set out in (Attachment 1).
- 9. I make this statement from my personal knowledge and understanding, and from the inquiries that I have made in my position as Acting Director of the Hazardous Industries Group.
- 10. WorkSafe Victoria is the trading name for the Victorian WorkCover Authority.

Question 1 - Detail any attendances by VWA inspectors since 2011 at the Anglesea mine in relation to risks of fire arising from or impacting on the mine.

- 11. Since 2011, WorkSafe has attended the Anglesea mine on 28 occasions. Of these visits 13 included discussions relating to fire prevention or response matters. The remaining 15 visits covered a range of other safety matters.
- 12. Fire on mobile plant is a recognised risk in the mining industry generally. In February 2010 WorkSafe published a safety alert to highlight this risk. The alert provided some commentary on the possible causes of fire on mobile plant and outlined numerous examples of risk control measures (**Attachment 2**).
- 13. On 27 February 2012, WorkSafe received an incident notification from the Anglesea mine in relation to a fire that had occurred on 26 February which had resulted in damage to an excavator (**Excavator Incident**). There were no employees in the vicinity of the fire at the time of the incident and no injuries were reported.
- 14. WorkSafe subsequently communicated with the Mine Manager about the incident.

- 15. On 21 May 2012 an Inspector attended the Anglesea mine for an oversight inspection and to make further enquiries pursuant to the telephone conversation between the Mine Manager and WorkSafe. Management of Alcoa Australia Limited (Alcoa) informed the Inspector that while the specific cause of the fire was unable to be proven, there were a number of theories regarding the cause of the fire and these had been documented in a site investigation. Management agreed to forward the investigation report onto WorkSafe (Attachment 3 Entry Report).
- 16. Shortly after the 21 May attendance WorkSafe received a copy of the Investigation report in relation to the Excavator Incident. This report identified ten actions that were to be taken by Alcoa to control risks associated with fire on mobile plant. At subsequent attendances these actions were verified by WorkSafe Inspectors.
- 17. On 14 September 2012, a WorkSafe Inspector attended the Anglesea mine. During the visit, the Inspector reviewed Alcoa's investigation and findings in respect of the Excavator Incident and commenced further enquiries (**Attachment 4**).
- 18. On 17 September 2012, a WorkSafe Inspector and Senior Mining Engineer attended the Anglesea mine as part of the 2012 verification. During the visit, WorkSafe and Alcoa discussed Safe Work Instructions and Alcoa agreed to provide WorkSafe with its Safe Work Instructions relating to the fire prevention for excavators and trucks (Attachment 5).
- 19. In November 2012 another alert titled "Preventing mobile plant fires" was published by WorkSafe. This alert was created following an increase in the instances of fires on mobile plant particularly in underground mines. This alert was drafted using the accumulated knowledge of WorkSafe's enquiries into the circumstances of mobile plant fires as notified over the preceding time period. The alert contained a more detailed analysis of the identified causes of fire and a breakdown of control measures into categories including design, installation and maintenance. It also included information concerning possible mechanisms to implement in the event that an emergency response was required (Attachment 6).
- 20. On 10 May 2013, a WorkSafe Inspector attended the Anglesea mine in response to a fire on an excavator that occurred on 8 May 2013 (**Second Excavator Incident Attachment 7**).
- 21. On 11 June 2013, a WorkSafe Inspector attended the Anglesea mine to follow up on matters dealt with at previous visits, including the Second Excavator Incident. During this visit, the Inspector attended the workshop and noted that corrective actions had occurred. The Inspector also noted that there were future corrective actions that Alcoa was required to take in respect of fire prevention, including reviewing procedures with employees in relation to egress strategies when fire is either suspected or involved on plant (Attachment 8).
- 22. On 19 March 2014, a WorkSafe Inspector attended the Anglesea mine for an oversight inspection and follow up on the 2013 verification (conducted on 25 26 September 2013). During this visit, the Inspector observed Alcoa's Emergency Management Plan which included hazard assessment and evacuation procedures in response to fires on site. WorkSafe discussed with Alcoa the importance of having a consultative process with firefighting agencies in respect to coal field fires and the

Emergency Management Plan. As part of the visit, WorkSafe also made enquiries into a small fire in an excavator that occurred on 6 November 2013 (**Third Excavator Incident - Attachment 9**). Alcoa representatives advised that compliance and prevention actions had been taken including reiterating the weekly wash down of the excavator is undertaken and documented and further training for personnel was being scheduled to ensure firefighting and fire evacuation procedures were well known.

- 23. On 6 May 2014, a WorkSafe Inspector attended the Anglesea mine for an oversight inspection and follow up on the 2013 verification. The Inspector followed up on the Third Excavator Incident and observed that all coal field employees were being instructed regularly in fire evacuation and firefighting procedures, and the weekly wash procedure was being documented in compliance with the agreed risk control measures identified by Alcoa during the last attendance. In respect of the Emergency Plan, the Inspector noted that a meeting had been scheduled between Alcoa and Surf Coast Shire Council in relation to fire risks (**Attachment 10**).
- 24. On 17 July 2014, a WorkSafe Inspector attended the Anglesea mine for an oversight visit and a follow up on the 2013 verification. During this visit, the Inspector discussed the 2014 verification and noted that this would involve verification of the major mining hazards: ground control and mine fires. In regard to the Emergency Plan, Alcoa confirmed that consultation had occurred with the Country Fire Authority (**CFA**) and the Surf Coast Shire Council in relation to Alcoa's ability to control fires within the coalfield. Alcoa also confirmed that the CFA indicated further emergency management improvement was required and Alcoa was reviewing its Emergency Management Plan. WorkSafe indicated that it would review the outcomes of the ongoing processes as part of its 2014 verification which would commence in August 2014 (**Attachment 11**).
- 25. On 25 and 26 August 2014, WorkSafe Inspectors attended the Anglesea mine as part of the 2014 verification. WorkSafe inspected, examined and made inquiries relating to risk and hazard management and Alcoa's Emergency Management Plan (Attachment 12 and Attachment 13).
- 26. On 28 November 2014, a WorkSafe Inspector attended the Anglesea mine as part of the 2014 verification. During this visit, the Inspector discussed changes to the recommendations relating to the Emergency Management Plan in light of the Surf Coast Mine Emergency Management Task Force (**Taskforce**) review and actions. This Taskforce performs the same functions as the Latrobe Valley Coal Mine Emergency Management Task Force however the meetings are less frequent (**Attachment 14**).
- 27. On 12 January 2015, WorkSafe Inspectors attended the Anglesea mine to follow up on issues and actions arising out of the 2014 verification relating to risk and hazard management and Alcoa's Emergency Management Plan. The Inspectors noted actions that needed to be taken by Alcoa and indicated WorkSafe would review these actions in April 2015 (Attachment 15).
- 28. On 8 April 2015, a WorkSafe Inspector attended the Anglesea mine for an oversight inspection and follow up on the 2014 verification (**Attachment 16**).

- 29. On 29 June 2015, WorkSafe Inspectors attended the Anglesea mine for an oversight inspection and to make further inquiries in response to the announced closure of the mine. During this visit, WorkSafe and Alcoa discussed hazard and risk identification relating to the closure of the mine including fire and emergency planning, fire controls such as overburden capping and fire services equipment. At this time, the Inspectors also issued Alcoa with an Improvement Notice in relation to a bulldozer that did not have an on board fire suppression system (Attachment 17).
- 30. In addition to responding to specific incidents, WorkSafe also chairs and is an active member of the Earth Resources Tripartite Safety Forum which meets every four months. The forum's primary objective is to improve the health and safety performance within the Earth Resources industry. Fire on plant received particular attention during the June 2012 meeting and continued to be discussed at further meetings.

Question 2 - Describe the role by VWA in the Surf Coast Mine Task Force and describe any meetings of the Task Force attended by the VWA.

- 31. On 29 October 2014 the commencement of the Taskforce was announced. The terms of reference are:
 - 31.1 review the fire emergency preparedness of the four Victorian brown coal mines;
 - 31.2 oversee the implementation of the relevant Hazelwood Coal Mine Inquiry Affirmations and improvement plans; and
 - 31.3 supporting improved capability and inter-operability between the coal mine industry and Government agencies.
- 32. I represent WorkSafe as a member of the Taskforce. To date, I have attended all four Taskforce meetings.
- 33. The first Taskforce meeting was held on 14 November 2014 (**Attachment 18**). At this meeting Craig Lapsley, the Chair of the Taskforce and Emergency Management Commissioner, discussed
 - the background to the Hazelwood Mine Fire Inquiry's outcomes;
 - the reasons for the formation of the Taskforce;
 - Membership to the Taskforce; and
 - the Taskforce's Terms of Reference.
- Action items to be addressed in the subsequent meetings were also discussed (**Attachment 19**).
- 35. The second Taskforce meeting was held via teleconference on 20 November 2014. The key points of discussion during this teleconference were:

- 35.1 confirmation of the Taskforce's Terms of Reference to best reflect the circumstances of the Anglesea mine;
- 35.2 the schedule of meetings and actions to address key priorities; and
- 35.3 the Planning for Community meeting scheduled for 1 December 2014.
- 36. On 17 December 2014 the third Taskforce meeting was a workshop. The workshop was held for Taskforce members to discuss:
 - Alcoa's fire mitigation program;
 - learnings from the Hazelwood Mine Fire Inquiry Report;
 - Alcoa's Emergency Management Plan, operational response capabilities;
 - an environmental management plan;
 - a community connection plan; and
 - a communications plan.

WorkSafe actively participated in the workshop, and led discussion relating to learnings from the Hazelwood Mine Fire Inquiry Report (**Attachment 20**).

- 37. The fourth Taskforce meeting was held on 28 May 2015.
- 38. During the meeting members discussed the impact of the recently announced closure of the mine on fire preparedness and risk assessment processes. Alcoa also noted that they would still prepare for the 2015/2016 fire season irrespective of whether the mine would be active or not. WorkSafe advised that it would continue to monitor Alcoa during the mine closure process (**Attachment 21**).

Question 3 - Describe any discussions between the VWA and the mine operator concerning a review of the mine's Emergency Plan in light of the decision announced in May 2015 to close the mine.

- 39. In November 2014, January 2015 and April 2015, WorkSafe attended the Anglesea mine for the purposes of following up on the findings and recommendations of the 2014 Verification Report, including the findings in relation to the Emergency Management Plan (Attachment 22).
- 40. On 24 June 2015, a discussion was held between a WorkSafe Senior Inspector and the Alcoa Mine Manager at Anglesea in regard to the necessary actions to be taken by Alcoa in respect of the 2014 Verification Report and in light of the closure of the mine. These actions included an Emergency Management Plan update, risk assessments and the review of feedback from the CFA.
- 41. On 25 June 2015, an email was sent from the Senior Inspector to the Mine Manager confirming the discussion of the previous day and requesting an update on the matters (**Attachment 23**).

- 42. On 26 June 2015, the Mine Manager responded to WorkSafe by email. Amongst other things, the Mine Manager confirmed that Alcoa had updated the Emergency Management Plan with a section specifically for coal fires. He also confirmed that Alcoa was committed to reviewing the Emergency Management Plan in light of the various hazards that may arise after closure and when the site goes into initial caretaker mode.
- 43. On 29 June 2015, WorkSafe Inspectors and a Senior Mining Engineer attended the Anglesea mine for an oversight inspection and in response to the announced closure of the mine. During this visit WorkSafe and Alcoa discussed the Emergency Management Plan. Alcoa had reviewed the Emergency Management Plan in light of the Hazelwood Mine Fire Inquiry recommendations, WorkSafe feedback from the 2014 Verification Report and the CFA Pre-Incident Plan. This review resulted in a complete rewrite of the Emergency Plan.

Question 4 - Advise whether the Anglesea mine is a 'prescribed mine' for the purposes of the OHS Regulations.

- 44. The Anglesea mine is not a prescribed mine within the meaning of the *Occupational Health & Safety Regulations* 2007 (**Regulations**) as it:
 - 44.1 is not an underground mine;
 - 44.2 is not a mine that has been determined to be a prescribed mine by WorkSafe under regulation 5.3.4; and
 - is not a mine that is one of a class of mines that have been determined to be prescribed mines by WorkSafe under regulation 5.3.4.

Question 5 - Describe what the VWA has done to require the mine operator to comply with its obligations pursuant to Part 5.3 of the OHS Regulations in light of the decision announced in May 2015 to close the mine.

- 45. On 26 June 2015, WorkSafe attended a meeting with Alcoa management and the Department of Economic Development, Jobs, Transport and Resources. At the meeting, the parties discussed Alcoa's plan to eliminate or otherwise mitigate the risk of a coal fire occurring after the cessation of coal mining. WorkSafe indicated that it would keep in regular contact with the mine during the coal capping and decommissioning works.
- 46. On 29 June 2015, WorkSafe Inspectors and a Senior Mining Engineer attended the Anglesea mine for an oversight inspection. During the visit, WorkSafe:
 - 46.1 engaged in discussions with Alcoa regarding ongoing workplace safety as a result of the mine closure;
 - discussed Alcoa's employer action response plan to the 2014 Verification Report;
 - 46.3 discussed Alcoa's proposed rehabilitation plan for the site;

- inspected the site for the purposes of making enquiries regarding the fire preparedness of the mine over the 2015/2016 fire season and assessing the status and plan for the closure of the mine with regard to the mitigation of the risk of a coal mine fire:
- observed and discussed the 1000mm overburden capping operation that had commenced within the coal pit;
- 46.6 made enquiries in respect of the measurement of the overburden capping thickness;
- discussed Hazard Identification with Alcoa in respect of plant fires and indicated that an updated Hazard Identification needed to be undertaken particularly in relation to the hazards of fire and ignition sources;
- 46.8 made enquires in respect of Alcoa's Emergency Management Plan;
- 46.9 made enquiries in respect of Alcoa's Pre-Incident Plan which was developed by the CFA and outlined the level response required for different fire scenarios; and
- 46.10 issued an Improvement Notice in respect of a bulldozer that did not have a fire suppression system on board.
- 47. During this visit, WorkSafe also identified the following matters that would be considered at its next visit on 12 August 2015:
 - 47.1 fires (emergency planning);
 - 47.2 controls relating to fire i.e. overburden capping/ fire service equipment;
 - 47.3 traffic management;
 - 47.4 contractor management (if applicable);
 - 47.5 ground control;
 - 47.6 batter stability; and
 - 47.7 water management (**Attachment 24**).
- 48. Since this Entry Report was completed an additional visit prior to 12 August 2015 has been planned.

Question 6 - In its role as the regulator of the fire in the Anglesea mine, advise if the VWA is satisfied that the mine operator has considered and implemented all of the sustainable, practical and effective options to decrease the risk of fire arising from or impacting the Anglesea mine? If so, what is the basis of the satisfaction? If no, what is the VWA intending to do to satisfy itself of these matters prior to 31 August 2015?

49. WorkSafe continues to monitor the Anglesea mine for compliance with its obligations under the Occupational Health and Safety Act (2004). In appropriate

- circumstances WorkSafe will undertake enforcement activity if it considers that Alcoa has failed so far as reasonably practicable, to provide or maintain a safe workplace.
- 50. WorkSafe has made four visits to the Anglesea mine since the 2014 Verification Report was issued. Alcoa is making progress on implementing the recommendations in the report.
- 51. In respect of the closure of the mine, Alcoa has adopted a method to mitigate the risk of a coal mine fire by the exposed coal with suitable inert material sourced primarily from the internal overburdened dumps (**Capping**). The Capping will be laid over the horizontal areas of exposed coal (the vast majority of exposed coal area in the mine) at a minimum 1000mm thickness which will effectively prevent underlying coal in these areas from exposure to oxygen, thereby mitigating the fire risk. The remaining exposed coal along the batters will be subject to a monitoring program. WorkSafe is currently reviewing the adequacy of this strategy and the preliminary assessment that is based on:
 - 51.1 the site's history of mine fire;
 - 51.2 the risk assessment and comparison of the mines fire risk profile against the Latrobe Valley Coal Mines;
 - 51.3 the implementation of the recommendations made by the technical mining specialists, Mining One, who have been engaged by Alcoa;
 - 51.4 the preliminary review of industry capping of coal practices.
- 52. On 29 June 2015, WorkSafe attended the Anglesea mine. At the time of WorkSafe's visit, the Capping of the mine had commenced. WorkSafe made enquiries regarding the source and nature of the Capping. The process involves excavating and placing the Capping material to ensure a 1000mm minimum coverage and developing a plan to maintain the integrity of the Capping layer.
- 53. WorkSafe was also informed by Alcoa that an internal risk assessment of the plant and mine closure had been performed and that mine fire risk was considered as part of this assessment. The risk assessment had considered mine fire caused by spotting from bushfires, spontaneous combustion of in situ coal and mobile plant fire spreading onto exposed coal.
- 54. During the visit, WorkSafe was also informed that the adequacy of the Capping as a method of mitigating the risk of a coal fire from bush fire spotting was to be reviewed both internally and externally by technical experts (**Attachment 25**).
- 55. The external review report by Mining One has now been provided.
- 56. In discussions with Alcoa on 15 July, WorkSafe was informed that the internal review had been completed.
- 57. WorkSafe plans to return to the Anglesea mine on 22 July 2015 to monitor Alcoa's progress against WorkSafe's Oversight Action Plan for the Alcoa Anglesea mine.

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Dated: July 2015

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ROBERT KELLY

List of Documents

- 1. Attachment 1 Letter from the Hazelwood Mine Fire Inquiry dated 23 June 2015 [VGSO.1006.001.0013].
- 2. Attachment 2 WorkSafe Alert Fires on mobile plant dated February 2010 [VGSO.1006.001.0015].
- 3. Attachment 3 WorkSafe Entry Report dated 21 May 2012 [VGSO.1006.001.0016].
- 4. Attachment 4 WorkSafe Entry Report dated 14 September 2012 [VGSO.1006.001.0019].
- 5. Attachment 5 WorkSafe Entry Report dated 17 September 2012 [VGSO.1006.001.0024].
- 6. Attachment 6 WorkSafe Safety Alert Preventing mobile plant fires [VGSO.1006.001.0028].
- 7. Attachment 7 WorkSafe Entry Report dated 10 May 2013 [VGSO.1006.001.0030].
- 8. Attachment 8 WorkSafe Entry Report dated 11 June 2013 [VGSO.1006.001.0034].
- 9. Attachment 9 WorkSafe Entry Report dated 19 March 2014 [VGSO.1006.001.0040].
- 10. Attachment 10 WorkSafe Entry Report dated 6 May 2014[VGSO.1006.001.0048].
- 11. Attachment 11 WorkSafe Entry Report dated 17 July 2014 [VGSO.1006.001.0055].
- 12. Attachment 12 WorkSafe Entry Report dated 25 August 2014 [VGSO.1006.001.0062].
- 13. Attachment 13 WorkSafe Entry Report dated 26 August 2014 [VGSO.1006.001.0067].
- 14. Attachment 14 WorkSafe Entry Report dated 28 November 2014 [VGSO.1006.001.0073].
- 15. Attachment 15 WorkSafe Entry Report dated 12 January 2015 [VGSO.1006.001.0078].
- 16. Attachment 16 WorkSafe Entry Report dated 8 April 2015 [VGSO.1006.001.0084].
- 17. Attachment 17 WorkSafe Entry Report dated 29 June 2015 [VGSO.1006.001.0089].
- 18. Attachment 18 Email chain titled Meeting with Surf Coast Shire and the Mayor Cr Margot Smith [VGSO.1006.001.0097].

- 19. Attachment 19 Email chain titled Surf Coast Taskforce Meeting Notes [VGSO.1006.001.0101].
- 20. Attachment 20 Email chain titled Surf Coast Coal Mine Emergency Management Taskforce Workshop [VGSO.1006.001.0105].
- 21. Attachment 21 Email chain titled Alcoa meeting notes [VGSO.1006.001.0111].
- 22. Attachment 22 Verification Findings Report Alcoa Australia Alcoa Agreement NO. 6829 August 2014 [VGSO.1006.001.0125].
- 23. Attachment 23 Email titled Update actions 2014 verification and Emergency management status [VGSO.1006.001.0164].
- 24. Attachment 24 WorkSafe Entry Report dated 29 June 2015 [VGSO.1006.001.0165].
- 25. Attachment 25 Site Visit Technical Report dated 29 June 2015 [VGSO.1006.001.0173].