

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

STATEMENT OF LINDA CRISTINE

Date of Document: 18 August 2015
 Filed on behalf of: The State of Victoria
 Prepared by:
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 Attention: Andrew Suddick

I, **Linda Cristine**, of 50 Lonsdale Street, Melbourne, Victoria, Director, Inquiry Response Team, Department of Health and Human Services, can say as follows:

A. Introduction

1. My full name is Linda Cristine.
2. I am the Director, Inquiry Response Team, at the Department of Health and Human Services (**the Department**) based at 50 Lonsdale Street, Melbourne.
3. I have been in this role since 11 May 2015. My primary responsibility involves coordination of the Department's response to the Hazelwood Mine Fire Inquiry and contributing to the strategic directions of the Health Protection, Regulation and Emergency Management Division of the Department.
4. I hold a Bachelor of Arts in Communications from the University of Western Sydney and an Executive Masters in Public Administration from the University of Sydney.
5. I have worked at the Department since 2 February 2011 in various roles, including as Director of Client Outcomes and Service Improvement in the South Division and previously as the Deputy Regional Director and Regional Director of the Southern Metropolitan Region of the former Department of Human Services.
6. Prior to commencing with the Department, I was the Director of Sector Development and Funding Reform in the New South Wales Department of Human Services. I have worked in various senior public sector roles in health and human services in New South Wales.
7. This statement has been prepared pursuant to the request made by the Principal Legal Advisor assisting the Hazelwood Mine Fire Board of Inquiry by letter dated 10 August 2015 (**the Letter**).

8. The Letter requests a witness statement from an employee of the Department which explains the work done by the Department in investigating whether deaths occurred in the Latrobe Valley that were related to the Hazelwood Coal Mine Fire.
9. The Letter requests that the witness statement should:
 - 9.1 refer to and attach all public statements by the Department on this issue and identify the author and position of each such statement;
 - 9.2 explain what datasets were obtained by the Department from Births, Deaths & Marriages Victoria (**BDMV**) and what reviews were conducted of those datasets and who conducted those reviews;
 - 9.3 explain what analysis was performed (and who performed it) on the hospital emergency admissions data for Victoria where the usual place of residence of the patient was listed as postcode 3840, 3842, 3825 or 3844;
 - 9.4 describe the review of BDMV mortality data for 2009 and identify who did it; and
 - 9.5 address any other issues that the Department considers are relevant to paragraph 6 of the terms of reference in the Hazelwood Mine Fire Board of Inquiry, which is whether the Hazelwood Coal Mine Fire contributed to an increase in deaths, having regard to any relevant evidence for the period 2009 to 2014.
10. This statement addresses each of these matters in Part B below.
11. This statement is made partly based on my own knowledge, having made enquiries, and partly on information contained in records of the Department.

B. Department's response to Board of Inquiry's questions

Public statements by the Department on this issue and identify the author and position of each such statement

12. I assume that this request also includes public statements made by the Chief Health Officer.
13. The Department made the following public statements on whether the Hazelwood Coal Mine Fire contributed to an increase in deaths, having regard to any relevant evidence for the period 2009 to 2014:
 - 13.1 On or about 11 September 2014, the Department provided a statement to the ABC 7.30 program. This statement was prepared by the Department's media unit and authorised by Pier De Carlo, Deputy Secretary. A copy of this document is attached (**Attachment 1**).
 - 13.2 A document entitled '*Reports of deaths in the Latrobe Valley claimed to be related to the Hazelwood Coal Mine fire*' dated September 2014 was published on the www.health.vic.gov.au website on or about 16 September 2014. This document was prepared by Departmental staff from the Health

Protection Branch, approved by Pier De Carlo, Deputy Secretary. A copy of this document is attached (**Attachment 2**).

- 13.3 A document entitled ‘*Reports of deaths in the Latrobe Valley related to the Hazelwood coal mine fire*’ dated 17 September 2014 was published on the www.health.vic.gov.au website. This document was prepared by Departmental staff in the Health Protection Branch and the Office of the Chief Health Officer, approved by Pier De Carlo, Deputy Secretary. A copy of this document is attached (**Attachment 3**).
- 13.4 A document entitled ‘*Reports of deaths in the Latrobe Valley related to the Hazelwood coal mine fire*’ dated 22 October 2014 was published on the www.health.vic.gov.au website. This document was prepared by Departmental staff in the Health Intelligence Unit and the Office of the Chief Health Officer, approved by Pier De Carlo, Deputy Secretary. A copy of this document is attached (**Attachment 4**).

What datasets were obtained by the Department from BDMV and what reviews were conducted of those datasets and who conducted those reviews

14. The Department obtained the following datasets from BDMV:
- 14.1 On or about 3 September 2014 the Department received a dataset from BDMV that tabulated the number of deaths by month for the period January to June for the years 2009 to 2014 (inclusive) where the place of usual residence of the deceased was listed as postcodes 3840, 3842, 3825 and 3844 (**Dataset A**). It is my understanding that Dataset A was requested from BDMV by a member of the public, and that when BDMV provided this dataset to the member of the public, BDMV also provided a copy of the dataset to the Department.
- 14.2 On or about 8 December 2014, the Department requested BDMV provide the unit record (containing date of birth, date of death, gender, cause of death, postcode of usual residence at date of death, date of registration) data extract available as at the data of the request for individuals who:
- 14.3.1 died on or after 1 January 2009; and
- 14.3.2 resided in any of the following postcodes as at the date of their death: 3840, 3842, 3825 or 3844 (**Dataset B**).
- 14.3 On or about 8 December 2014, the Department also requested BDMV provide the unit record (containing date of birth, date of death, gender, postcode of usual residence at date of death, date of registration) data extract available as at the data of the request for individuals who:
- 14.4.1 died on or after 1 January 2009; and
- 14.4.2 resided in Victoria as at the date of their death (**Dataset C Request**).

- 14.4 On or about 15 January 2015, the Department received the following data from BDMV:
- 14.4.1 Dataset B; and
- 14.4.2 the data specified in the Dataset C Request, which included cause of death data (**Dataset C**).
15. The Department undertook the following review of Dataset A:
- 15.1 Dataset A was reviewed by Departmental staff in the Health Intelligence Unit and the Office of Chief Health Officer and Dr Rosemary Lester, Chief Health Officer.
- 15.2 The Department's preliminary findings regarding Dataset A were published on the www.health.vic.gov.au website (see Attachments 2 and 3).
- 15.3 On or about 16 September 2014, the Department engaged the University of Melbourne to undertake a review of Dataset A. A copy of the Project Brief and Response is attached (**Attachment 5A and 5B**).
- 15.1 On or about 26 September 2014, the University of Melbourne provided the Department with a report titled '*Review of Birth Death & Marriages Victoria (BDMV) mortality data for the Latrobe Valley and the time of the Hazelwood coal mine fire in Morwell*'.
- 15.2 On or about 22 October 2014, the Department's further findings regarding Dataset A were published on the www.health.vic.gov.au website (see Attachment 4).
16. The Department undertook the following review of Dataset B and Dataset C:
- 16.1 An initial review of Dataset B and Dataset C was undertaken by Liza Kelsall, Analyst, Health Intelligence Unit and collated into a spread sheet.
- 16.2 On or about 2 February 2015, the Department engaged the University of Melbourne to undertake an analysis of Dataset B and Dataset C. A copy of the Project Brief and Response is attached (**Attachment 6A and 6B**).
- 16.3 On or about 2 February 2015, the University of Melbourne was also asked to undertake a peer review analysis of an unpublished paper by A. Barnett, Queensland University of Technology. This request forms part of the same initial project brief attached at Attachment 6.
- 16.4 An update project brief for the University of Melbourne, inclusive of the requirement to include analysis of air quality and temperature data, was developed in May 2015. A copy of the Updated Project Brief is attached (**Attachment 7**).
- 16.5 On or about 28 April 2015, the University of Melbourne provided the Department with a report titled '*Review of "Analysis of death data during the Morwell mine fire," A. Barnett, working paper, unpublished (2014,*

Queensland University of Technology) and “An updated analysis of death data during the Morwell mine fire,” A. Barnett, working paper, unpublished (2015, Queensland University of Technology)’.

- 16.6 On or about 4 June 2015, the University of Melbourne provided the Department with a report titled ‘*Age-standardised mortality and cause of death in the Latrobe Valley at the time of (and five years prior to) the Hazelwood coalmine fire in Morwell, Victoria*’.

Explain what analysis was performed (and who performed it) on the hospital emergency admissions data for Victoria where the usual place of residence of the patient was listed as postcode 3840, 3842, 3825 or 3844

17. The Department analysed the Victorian Admitted Episodes Dataset and Victorian Emergency Minimum Dataset (**Hospital Admissions Data**) where the usual place of residence of the patient was listed as postcode 3840, 3842, 3825 or 3844 (**Dataset D**).
18. The analysis of Dataset D was undertaken by Liza Kelsall, Health Intelligence Unit and collated into a spread sheet.
19. I understand that the analysis performed on Dataset D involved:
- 19.1 a review of the International Classification of Disease code for each admission; and
- 19.2 a review of the admissions data against daily PM2.5 and daily mean temperatures.

Describe the review of BDMV mortality data for 2009 and identify who did it

20. Dataset B was reviewed by Liza Kelsall, Health Intelligence Unit.
21. I understand that the review of Dataset B was a desktop review of cause of deaths.

Address any other issues that the Department considers are relevant to paragraph 6 of the terms of reference in the Hazelwood Mine Fire Board of Inquiry

22. On or about February 2015, the Department engaged Monash University to undertake a literature review of morbidity and mortality studies associated with environmental smoke events. A copy of the Project Brief is attached (**Attachment 8**).
23. On or about 5 May 2015, the University of Melbourne provided the Department with a report titled ‘*Updated Literature Review on Mortality and Morbidity associated with Environmental Smoke Events*’.
24. On 7 July 2015, the Victorian Government Solicitor’s Office provided the Board of Inquiry with a Letter of Authority addressed to Monash University authorising the release of the report titled ‘*Updated Literature Review on Mortality and Morbidity associated with Environmental Smoke Events*’. A copy of this letter is attached (**Attachment 9**).

25. On 7 July 2015, the Victorian Government Solicitor's Office provided the Board of Inquiry with a Letter of Authority addressed to the University of Melbourne authorising the release of the reports titled '*Age-standardised mortality and cause of death in the Latrobe Valley at the time of (and five years prior to) the Hazelwood coalmine fire in Morwell, Victoria*' and '*Review of "Analysis of death data during the Morwell mine fire," A. Barnett, working paper, unpublished (2014, Queensland University of Technology) and "An updated analysis of death data during the Morwell mine fire," A. Barnett, working paper, unpublished (2015, Queensland University of Technology)*'. A copy of this letter is attached (**Attachment 10**).