

5 August 2015

Professor Ian Gordon Statistical Consulting Centre University of Melbourne

By Email:

Dear Professor Gordon

## 2015 Hazelwood Coal Mine Fire Inquiry

We act for Voices of the Valley (VotV). VotV is an incorporated group of residents in the Latrobe Valley which formed in March 2014 during the Hazelwood Coal Mine Fire due to concerns about the adverse effects the fire was having on the health of persons living and working in the affected area.

As part of the 2015 Hazelwood mine fire inquiry VotV will be making a submission with reference to paragraph 6 and 7 of the Terms of Reference (see attachment B). We write to engage you as an expert to prepare an expert report in accordance with the instructions below.

## Background

The following may provide useful background and context.

- a. The mine fire ignited as a result of embers from nearby bushfires entering the mine. It burnt from 9 February 2014 and was declared safe on 25 March 2014.
- b. Monitoring of air quality in the second week of the Hazelwood Mine fire indicated very high levels of carbon monoxide and PM<sub>2.5</sub>. The pollutants identified can have severe health effects on people, in particular on the elderly, unborn children and those with pre existing cardiovascular and respiratory problems.
- c. Residents of Morwell and nearby towns including Moe and Traralgon reported a number of adverse health impacts which commenced the first day of the fire.
- d. VotV subsequently collated information to ascertain whether there was an increase in deaths following the Hazelwood Coal Mine Fire. Figures obtained from Births Deaths and Marriages (BDM) indicated that there had been an increase in deaths in the Latrobe Valley during the time of the fire. This issue did not form part of the initial Hazelwood Mine Fire Inquiry .

VotV will be seeking leave to make submissions and cross examine witnesses in relation to the following terms of reference:

- Term of Reference 6: Whether the Hazelwood Coal Mine Fire contributed to an increase in deaths, having regard to any relevant evidence for the period 2009 to 2014;
- Term of Reference 7: Short, medium and long term measures to improve the health of the Latrobe Valley communities having regard to any health impacts identified by the Board as being associated with the Hazelwood Coal Mine Fire.

## Instructions

You are instructed to:

- 1. Review the material supplied to you in relation to the 2014 Hazelwood Coal Mine Fire, and within the scope of your expertise, answer the following questions:
  - a. Having regard to the evidence contained in your brief and, in particular, documents numbered 3 to 7, in your opinion did the Hazelwood Mine Fire contribute to an increase in deaths in the Latrobe Valley? If so, please explain the increase by reference to:
    - i. Cause/Effect
    - ii. Statistical analysis
  - b. What, if any, limitations do you see in the data available in giving your opinion at question 1?
- 2. Prepare a report which sets out the conclusions which you have reached, and clearly states the basis on which you have relied upon or assumptions that you have made and which form part of the reasoning by which you reach your conclusions.
- If called by the Board of Inquiry to give evidence, be available as an expert witness at public hearings with respect to Term of Reference 6, in the Latrobe Valley between 1<sup>st</sup> September to 3<sup>rd</sup> September 2015.

In answering these questions please do not answer if they are not within your skills, experience, and expertise. Further, please clearly identify any limitations in the data and information available to you and set out any further material that would have been desirable to inform your expert opinion.

Please note that for the purposes of your report and for this letter of instruction, the 'Hazelwood Coal Mine Fire' is defined as the mine fire at the Hazelwood Mine from 9 February 2014 when the Hazelwood Mine Fire Inquiry Report 2014 found that it started, to the 25 March 2014 when it was declared safe by Mr Craig Lapsley.

In addition, please note that we have also briefed Graeme Lorimer, an air quality expert, to provide a report and be available to give evidence on air pollutants and the air movements in the Latrobe Valley during the Hazelwood mine fire. Mr Lorimer is preparing a draft report, which we expect to receive today or tomorrow. We will provide you with this report once we have received it. If you require any assistance in understanding the nature of the tasks you have been asked to undertake please contact me on 8341 3109.

Yours sincerely

Attithinson

Ariane Wilkinson Lawyer Environmental Justice Australia

## **Documents Attached:**

- 1. Practice Direction No. 2, Public Hearing for Terms of Reference 6 (Attachment A)
- 2. Terms of Reference (refer to 6 and 7 only) dated 26 May 2015 (Attachment B)
- 3. Report prepared by VotV on the Births, Deaths and Marriages data, which includes the raw data received from BDM. (Attachment C)
- 4. Associate Professor Adrian Barnett's report (Attachment D)
- Department of Health analysis, *Reports of Deaths in the Latrobe Valley claimed to be related to the Hazelwood mine fire*, September 2014 (Attachment E)
- 6. Department of Health factsheet, *Reports of Deaths in the Latrobe Valley related to the Hazelwood mine fire*, 17 September 2014 (Attachment F)
- 7. Melbourne University, *Review of Birth Deaths & Marriages Victoria (BDMV)* mortality data for the Latrobe Valley and the time of the Hazelwood coal mine fire in Morwell, undated (Attachment G)
- 8. Expert report of Professor Duncan Campbell (Attachment H)
- 9. Email from Hazelwood Inquiry Board to VotV (Attachment I)
- 10. Initial submission from VotV to Coroner dated 22 September 2014 (Attachment J)
- 11. Environmental Justice Australia submission to Coroner dated 29 October 2014 (Attachment K)
- 12. Extract from the 2014 Hazelwood Mine Fire Inquiry Report Parts 4.1 to 4.3. (Attachment L)