## Hazelwood mine fire and additional Latrobe Valley mortality data analysis Response to Project Brief – 13 February 2015

Review of supplementary Birth Deaths & Marriages Victoria (BDMV) mortality data for Latrobe Valley, and supplementary air quality monitoring data (Environment Protection Authority), and temperature records (Bureau of Meteorology) at the time of the Hazelwood coal mine fire, Morwell, February-March 2014

We agree to undertake the analysis described below, and advise if any conclusions can be drawn about any increase or decrease in deaths during the time of the fire (February to March 2014) or for the whole period (January to June 2014), compared to this period 2009-13, with assessments delivered by COB on the dates below.

We will produce a statistical report with the details of the methods used and the findings from the analysis of the BDMV datasets. We will discuss in the final assessment our judgement of conclusions that can be drawn from these findings. We will discuss in particular:

- Any excess deaths in the area/s affected by smoke from the coalmine fire, and adjacent areas, i.e. the four postcodes 3840 (Morwell), 3842 (Churchill), 3825 (Moe) and 3844 (Traralgon);
- And, if a statistically significant excess of deaths is demonstrated, whether these can be attributed to the Hazelwood coal mine fire and the smoke emitted.

## **Deliverables**

- A critical appraisal of the paper Analysis of death data during the Morwell mine fire, Barnett A. 2014 (working paper, unpublished), with reference to the appropriateness of the methods used and the statistical significance of the results reported;
- 2. A critical appraisal of the paper *An updated analysis of death data during the Morwell mine fire*, Barnett A. 2015 (working paper, unpublished);
- An analysis of the supplementary BDMV data sets, covering the age, sex and cause of death for the above four postcodes for the period January to June 2014 compared to January-June 2009-13, and February-March 2014 compared to February-March 2009-13;
- 4. An analysis of the association of these mortality data with air quality and temperature records for the period 2014, compared to February-March 2009-13.

## **Timeframe**

Preliminary assessment delivered by: Monday 27 February 2015

Final assessment report by: Monday 26 March 2015

Invoice estimate \$20 329 Monday 26 March 2015

Key contact: Dr Louisa Flander, Senior Research Fellow

Centre for Epidemiology and Biostatistics,

Melbourne School of Population and Global Health,

TEL

University of Melbourne 3010 VIC

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