IN THE MATTER OF

THE HAZELWOOD MINE FIRE INQUIRY

STATEMENT OF CORINNE JOY UNGER

I, Corinne Unger of 10 Amberelle Place, Chapel Hill, Brisbane, Queensland say as follows:

Professional Background

1. I have 30 years of domestic and international experience in land rehabilitation – 26 of which are in the area of mine rehabilitation and closure. I have a Bachelor of Science degree (Geomorphology/Climatology) and a Post Graduate Diploma in Geoscience (Applied Geomorphology) both from Macquarie University. I was awarded a Churchill Fellowship in 2009 and Medal in 2010 for research on leading practice for abandoned mine rehabilitation and post-mining land use in Austria, Germany, the UK and Canada. I am presently employed in three roles;

   - Self-employed Environmental Consultant specialising in mine rehabilitation and closure planning;
   - Senior Research Officer (part-time) for the Centre for Mined Land Rehabilitation within the Sustainable Minerals Institute, The University of Queensland, currently funded (2014-2016) under an Australian (black) Coal Industry's Research Program (ACARP) research grant and formerly (2011-2013) funded through the Centre for Mined Land Rehabilitation (CMLR) on abandoned mine research; and
   - Member of the Technical Review Board (TRB) from September 2015 (part-time).

   I attach a copy of my Curriculum Vitae.

Role with the TRB

2. I was appointed to the TRB in September 2015 in response to the change to its Terms of Reference to include rehabilitation.

Mine Rehabilitation and Closure

3. The creation of safe and stable landforms is a fundamentally important component of mine rehabilitation. However, rehabilitation goes beyond this definition. It is also important for rehabilitated mines to be non-polluting for human and environmental health. Further, there is usually a need to develop a clear understanding of the potential land use options. Successfully rehabilitated landscapes enable land uses which minimise ongoing maintenance, management and care. There may be some instances where mine rehabilitation plans need to explicitly plan for ongoing maintenance.

4. Good rehabilitation design commences from the outset of planning for a mine. Rehabilitation and closure designs are regularly reviewed and updated during the life of a mine as new knowledge is gathered and mine designs are refined and updated. As a mine approaches closure, the level of detail of the mine rehabilitation and closure plan should increase significantly.

5. Rehabilitation should be an operational task within the overall framework for closure design and planning. Progressive rehabilitation is a task undertaken during the life of a mine to remediate areas of disturbance that are no longer required. There are benefits to progressive rehabilitation, including fire risk reduction, dust suppression, trialling final rehabilitation concepts and building community and regulatory confidence.

6. The positive outcomes of effective closure planning (ICMM, 2008[1]) should mean that:

- Engagement with affected and interested parties will be more consistent and transparent;
- Communities will participate in planning and implementing actions that underpin successful closure;

[1] International Council on Mining and Metals, Planning for Integrated Mine Closure : Toolkit, 2008

- Closure decisions will be better supported by stakeholders;
- Planning for closure will become easier to manage;
- The accuracy of closure cost estimates will be improved;
- The risk of regulatory non-compliance will be minimized;
- Potential problems will be identified in a timely manner;
- There is more likely to be adequate funding for closure;
- Potential liabilities will be progressively reduced; and
- Opportunities for lasting benefits will be recognized and planned for adequately.

Rehabilitation Legislation

7 Victorian mineral resources legislation and regulations are dated and need to be revised to reflect international good practice.

8. There is a significant body of knowledge about good practice rehabilitation and closure which can be used as reference and as a basis for revision of Victorian legislation and regulations.

The Rehabilitation Bond System

9. Rehabilitation bonds are applied as a mechanism to cover the cost of rehabilitation should the mine owner, for whatever reason, be unable to undertake the works. It is important that the value of a bond accurately reflects the true costs of rehabilitation. These costs should include realistic sums for the research and development, monitoring and maintenance required to develop and implement the rehabilitation.

10. The bond for each mine should be reviewed regularly to ensure the amount reflects current costs to rehabilitate the mine.

The Way Forward

11. A key step to moving towards successful rehabilitation of the Latrobe Valley brown coal mines is to provide a coordinated, collaborative, knowledge-based approach to the issue. The Government must require all relevant agencies to work together so that issues such as water, fire, safety, stability, infrastructure, environment and bonds are regulated under the

one roof. There must be strong overall regulatory guidance and oversight of what the mines are doing and planning with regard to rehabilitation.

12. The Victorian Government needs to ensure regulatory processes mitigate the potential for negative mining legacies.

13. It is essential that the government has the appropriate technical capacity to support the implementation of legislation and regulations.

14. As part of the process of building rehabilitation and closure capacity within government, the existing legislation should be reviewed and updated to ensure community expectations for rehabilitation are addressed in accordance with international good practice.

15. It will be important for the Victorian Government to define standards and end-point criteria for safety and stability, as well as other environmental and end land use aspects of rehabilitation to clarify expectations for completion of rehabilitation.

16. Opportunities for economic development should concurrently be explored for employment associated with rehabilitation and remediation works.

17. The process of properly evaluating, risk assessing and costing rehabilitation plans will take a long period of time. This process will need to be led by government and should involve a multi-disciplinary group of people from relevant organisations, government departments, industry and the community. It must have continuity and be embedded in legislation so that it is resilient to changes of government.

Signature:

Corinne J. Unger

Date: 26/11/15