



Hazelwood Inquiry info/DPC@DTF

07/04/2014 01:04 PM

To Hazelwood Inquiry info/DPC@DTF

cc

bcc

Subject Morwell Mine Fire Submission

Title

Mr

First Name

Don

Surname

Tylee

Home or office phone

Mobile

Content of submission (you can choose multiple)

Measures taken by Hazelwood Coal Mine to prevent fire, Application and administration of regulatory regimes, Response to fire by Other Government Agencies, Other (please state)

If Other please state here

Immediate action to prevent future fires

Please select one of the following options

I acknowledge that my submission will be treated as a public document and may be published, quoted or summarised by the Inquiry.

Upload Submission

<http://hazelwoodinquiry.vic.gov.au/wp-content/uploads/formidable/Hazelwood-Mine-Fire-Inquiry-Tylee1.pdf>

Response to fire by Emergency Services, Response to fire by

Don Tylee
Traralgon

6th April 2014

The Board Members
Hazelwood Mine Fire Inquiry
Via Online Submission

Dear Messers Teague, Catford and Petering,

Submission to the Hazelwood Mine Fire Inquiry

I write as a private individual to share my thoughts and suggest several areas for detailed investigation during your inquiry. Having some professional and management experience in the private and public sectors, I am interested in some of the management processes before, during and after the disaster.

In summary I have concerns that:

- The risk management frameworks used by the Government and mine owner may not adequately reflect reality and community expectations;
- Immediate action must be taken on a long term solution to prevent another mine fire by ensuring all exposed coal is capped
- The Victorian Disaster Management framework be revised to provide better community support for “on-going” disasters such as the mine fire.

Risk Management Framework – Have ‘They’ Got it Right?

A risk management framework is regularly used to guide decision making in both private and government sectors. I ask that you investigate the risk management frameworks and assessments that (I hope) have been developed by the Government in regulating the mine, and by the mine owner in operating the mine.

Even when managing risk using an international standard such as ISO 13001, it is necessary, in my experience, to apply individual judgement in rating risks. I am concerned that the judgement used by the Government and mine owner in relation to the mine risks may not reflect current reasonable community expectations.

To provide an indication of where my concerns lie, I offer the following (somewhat simplified) view of risk management.

Typically a group of stakeholders will sit together and brainstorm possible risks. For example, the types of risk may include: Strategic, Environmental, Commercial, Operational, OH&S, Technical, Financial, Compliance, Community, Assets, Interagency, and Government etc. Each of the risks is then assessed as to the Likelihood that it will occur, and the Consequence if it occurs. Each risk is then given a rating, ranging from Low to Extreme, based on a table such as the following. This approach allows those planning to prioritise and identify suitable methods to mitigate the risks.

Consequence	Likelihood				
	Very likely	Likely	Possible	Unlikely	Highly unlikely
Severe	Extreme	High	High	High	Medium
Major	High	High	High	Medium	Medium
Moderate	High	Medium	Medium	Medium	Medium
Minor	Medium	Medium	Medium	Low	Low
Insignificant	Medium	Medium	Low	Low	Low

In relation to the recent mine disaster, I am concerned that the parties may have under-rated both the Likelihood and Consequences of a mine fire.

In my opinion, the Likelihood of a fire getting into the mine is at the highest level (Very Likely) as there is now an established pattern of such fires occurring (and I can not imagine how fire can be totally eliminated as a risk).

In my opinion, the Consequences of the fire in the mine are also at the highest level (Severe) as there may be severe impacts on:

- health (community, workers, fire fighters etc);
- property (mine assets, individual assets damaged adjacent to mine, community assets such as roads and drains if fire burns under Morwell etc);
- community (inability to live in affected areas during disaster, loss of commerce, reduction in house values, etc)
- state economy (loss of power, cost to fight fire and assist community etc)
- reputation (perceptions of incompetence of government and mine owners)

My rating of the 'fire in the mine' risk is therefore at the highest category - Extreme. I wonder how the Government and mine owner have evaluated the risk?

Moving next to mitigation of risks, the following table shows a typical hierarchy of controls.

Control Hierarchy	
Elimination	<i>Is it necessary?</i>
Substitution	<i>Is there a less hazardous alternative?</i>
Isolation	<i>Eg Restrict access, use in a closed container, fume cabinet?</i>
Engineering	<i>Eg Trolleys to move loads, guards on machinery, Fume cupboard?</i>
Administration	<i>Eg: Training, Safe Work Procedure, signage</i>
PPE – Personal Protective Equipment	<i>Eg: Gloves, respirator, safety glasses</i>

The most desirable mitigation for any risk is to eliminate it, and the least desirable (for an OH&S risk) is to provide protective apparel to people.

In relation to the mine fire risk, I believe it is reasonable to divide it into two zones: areas that are being actively mined and those that are not. In the active mining area, it is reasonable to mitigate the fire risk with an Engineering solution (eg sprinkler systems). In the areas where mining is complete, I believe the best solution is to

move to a higher level of mitigation by eliminating the risk (eg permanently cover exposed coal so that it does not catch fire).

How have the mine owner and Government approached this hierarchy of control and do their approaches meet reasonable community expectations?

Long Term Thinking For Community Benefit – Cap the Coal

I believe it is incumbent on the Government to protect the long term interests of the community they represent including the balancing of economic, health, environmental and lifestyle issues. I have previously heard the brown coal and electricity industries in the Latrobe Valley described as the source of the ‘economic miracle’ for Victoria. I am concerned, however, that this miracle is coming at the expense of the Latrobe Valley residents.

It would appear obvious that the current situation where coal is exposed to potential fire without any fire protection in place is a disaster waiting to happen (again and again). In my opinion, it is important not to become overly distracted in your inquiries into the source of the fire, as I can not see any way of totally eliminating sources of fire in future. It is more important for the Government and mine owner to be acting now to address the other root cause – unprotected exposed coal.

I believe that all exposed coal must have functioning active fire protection systems in place (eg sprinkler systems). I also believe that it is not reasonable for worked out areas of coal open cut coal mines to be deemed as rehabilitated when there are coal surfaces exposed.

I believe that it is important for the Board of Inquiry to recommend an immediate project to cap all exposed coal in unused areas of the Hazelwood mine. (There may also be a similar issue in other mines in the area including Yallourn North?). Any exposed coal that is not capped must have fire suppression in place.

Given the history of mines being abandoned in Gippsland and elsewhere, I also think that regulations should require progressive permanent capping of exposed coal once an area is finished, rather than leaving it to an unspecified future date. In my opinion, the full long term rehabilitation costs should be paid progressively, by current beneficiaries of the resource – not deferred to our future generation. I suspect the bond money currently held by the State for rehabilitation Hazelwood mine is not sufficient to cover all costs of rehabilitating the mine should the mine operator default.

I understand that permanent capping of the exposed coal areas in the Hazelwood mine would be a significant engineering project. I would not object if my Government financially assisted the mine owners in the project as I suspect that it may be a change in expectations from that originally envisaged on the privatisation of Hazelwood, and Victoria has benefited from the mine for many years before it was privatised. (It would also be a project that would economically benefit the LV through increased employment etc).

In summary, the key point is to act now in the long term interests of the community – stop future fires that can harm our people and literally undermine our community assets.

Response and Recovery – Is the Current Disaster Framework suitable for mine fires?

I understand that the Victorian disaster management framework, in simple terms, divides a disaster into Response and Recovery stages, with protocols to suit each. It appears that the framework may need to be adjusted to better manage this type of situation of mine fire which becomes an ‘on-going disaster’.

In comparing the Hazelwood mine event to previous bushfire events in Gippsland, I note the following differences:

- a bush fire threatens immediate loss of life and property – the mine fire threatens damage to health, lifestyle and economy, with uncertainty about the level of threat.
- in any particular area, a bush fire is usually contained to a short time period of 1 or 2 days – the mine fire went for weeks.
- a bush fire either burns a property or passes by (with or without assistance from fire crews) – the mine fire is a constant source of hazard for weeks.
- Once a bush fire has passed, there is a well established process for assisting the “victims” – there does not appear to be any established process for assisting mine fire “victims”.
- It is easier to identify a victim of a bushfire than the victim of smoke / ash from the mine fire. The government appeared to be much too focused on limiting its exposure to risk and cost, than on making a genuine attempt to help those that needed help (physical and / or mental). There should be suitable assistance available to anyone who asks, is able to demonstrate the need, and does not reasonably have the ability to provide on their own – the very narrow criteria applied during the mine fire was unreasonable.
- The community almost accepts that bush fires will occur every-so-often and there is little sense of blame. The community does not accept coal mine fires that persist for weeks and there is a sense of blame – for both the mine owners and responding agencies. This also impacts on individual’s perception as to whether they should reasonably be prepared for their own protection / recovery. I suspect the community says self preparation is required for bushfires but not for mine fires.
- There appeared to be much less community sympathy for victims of the mine fire than those affected by bush fires. I understand that there was very little money donated for the mine fire event. This is some what incongruous given that in some ways, people may suffer more in the long term from the mine fire.

- There is also a big grey area around insurance / legal action for negligence etc – all of which come after the event and should not distract from prevention and immediate relief actions.

In my opinion, the duration of the mine fire, the apparent lack of initial action from local and state governments, and the sense of blame that quickly developed around the mine owner and government agencies, created a heightened sense of community anxiety and anger that exacerbated people's fears and lack of trust in agencies.

In relation to the health information, this anxiety was also heightened by what I perceived to be the Government "hanging the Victorian Health Officer out-to-dry". I understand that there are no black and white answers to some things, but the community wants better information and preparedness in times of anxiety.

I therefore recommend that the disaster management framework be reviewed so that there can be greater initial action from the "traditional recovery agencies" during an event such as the mine fire.

I thank you for your consideration of my submission and your work on the Inquiry.