## HAZELWOOD MINE FIRE INQUIRY

#### Submission cover sheet

Post your submission with this cover sheet to:

Submissions Hazelwood Mine Fire Inquiry

PO Box 3460

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Title:	First Na		Surname: MIDDLEMISS	
Organisation represented(if applicable):				
Email address				
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Telephone:		Mobile:		
<ul> <li>☑ Origin and circumstances of fire</li> <li>☑ Measures by Hazelwood Coal Mine to prevent fire</li> </ul>		Respons	e to fire by:	
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PLEASE NOTE: SURVESSIONS CLOSE ON MUNDAY, 12 MAY 2014

# Submission to Board of Inquiry into Hazelwood Mine Fire 2014

#### By: G. Middlemiss

I am a long term resident of Morwell, a Latrobe City Councillor representing Central Ward (Morwell) and the Vice President of the Victorian District of the Mining and Energy Division of the Construction, Forestry, Mining and Energy Union (the principal union representing Hazelwood Mine and Power Station workers).

Several weeks into the fire I was invited to join one of the Community Advisory Groups set up by the Emergency Response Agencies.

I remained in Morwell for the duration of the Mine Fire and experienced the effects this fire had on community members.

Both organisations that I represent will make their own submissions to the Inquiry. This submission is intended to represent my personal views and to act as a conduit for a wider range of views that have been put to me by community members and power industry workers. These people have indicated that they will not be making a submission to the Inquiry but I believe their views should be heard.

I do not have the resources to investigate my own concerns nor the matters that have been put to me. The purpose of this submission is to highlight these issues in the hope that the Inquiry may feel that further investigation is warranted.

In some cases, I have raised unsubstantiated matters and rumours that appear to have gained a level of credence within the community affected by the mine fire. Whilst the Board of Inquiry may have reservations about such matters, I believe that they warrant investigation, if only to restore credibility to the responsible State agencies.

The sources of my information and documents included with this submission have been obscured in some cases as I have not obtained permission to divulge the identity of the sources.

I have divided my submission into five sections;

- Preparedness to combat fires originating outside the Mine.
- Cause of the Mine fire.
- Combating the fire.
- Agency responses to matters affecting the community.
- Suggestions for prevention of a recurrence of this type of Incident.

# 1.) Preparedness to combat fires originating outside the Mine

#### Stretton Report

There were two reports prepared for the Victorian government by Judge Stretton about 70 years ago relating to bush fire threats to the SECV Power Station/Mine at Yallourn.

These reports were used by SECV to justify extensive native vegetation clearance in the greater Yallourn area – including the Hernes Oak/Haunted Hills area between Yallourn and Morwell. When completed in the mid 1960s this area had been transformed into agricultural grassland.

Anecdotally, every external fire that has ever entered the Hazelwood Mine has been a very fast-moving grass fire originating in this grassed area to the west of the mine. This problem is now exacerbated by the added fuel load of some more recent timber plantations in this area.

It would appear that the external fire threat is largely the result of the changed environment introduced by the Power Industry.

Enhanced fire defences between the mine and this Western area appear warranted. The extensive grass area between the mine and the Strzelecki Highway is under the control of the mine operator and would appear suited to such measures.

The deep 'ravine' of the Morwell River Diversion between the Strzelecki Highway and the mine at the southern end of this area may be an impediment to rapid mobile fire response and this should be examined.

This is worth considering in context of next point.

## Mine-Based Fire Response Capability

Community and workforce input points to a significant reduction in mine mobile and static fire response equipment and manpower since privatisation of the mine. It appears that an increased role for CFA in combating Latrobe Valley Power Station and Mine fires during this period may have driven this reduction.

Evidence needs to be sought as to any reductions in mine fire prevention and fire fighting capability since privatisation. The drivers of any such reductions also need to be understood. There is considerable community concern at widespread reports that a fire service water ring main had been removed from the area where the fire occurred.

Comparisons between SECV mine fire prevention practice and allocated resources and those of the current mine operator appear warranted.

The role of government mine regulators in approval or acceptance of any reduction in mine fire defences also requires clarification.

#### Lack of Mine Remediation

This will no doubt be the subject of many submissions. Sufficient to say that, the already remediated section of the mine appears to have been little affected by, nor to have sustained, the fire.

The fire may have been totally prevented, or much reduced in impact and duration, if the worked-out section of the mine had been remediated by covering the exposed coal batters and mine floor with clay/soil. This material is readily available as 'overburden' is stripped ahead of coal winning.

Why only one small section of the mine was remediated, and not the remaining worked-out sections, requires clarification. Again the role of government mine regulators in this decision requires clarification.

### 2.) Cause of the Mine Fire

#### The Driffield Fire

There has been much media emphasis on this bush fire being the cause of the mine fire. The Premier, State Ministers, Police Commissioner and Senior Emergency Agency personnel have been at the forefront with the message that this fire was deliberately lit.

However, there is a view within the Morwell community that the Driffield fire was not the cause of the mine fire. There is speculation as to the reason for the emphasis placed on this fire.

I have spoken to, and heard from, CFA volunteers who fought the Driffield fire. They claim that there was a strong South East wind behind them at that time. That is, blowing away from the mine. The fire appears to have run in a Northerly direction along the general line of the Strzelecki Highway. That is, parallel to, but not towards, the mine.

These fire fighters claim that the Driffield fire did not enter the mine. They believe that it burnt itself out as it ran onto the already burnt-out ground of the Hernes Oak fire, in the region of the Strzelecki Highway/Prince's Freeway junction.

I have also spoken to a media representative who had, after the fire, walked the grassland between the Driffield fire and the mine looking for evidence of ember 'spotting' from that fire towards the mine. None could be found.

CFA fire maps and on site observation supports these views.

The relationship between the Driffield fire and the mine fire needs to be clarified to settle community speculation.

#### The Hernes Oak Fire

This fire appears to have the widest community acceptance as the cause of the mine fire.

Whilst the fire moved in a North Easterly direction around Morwell and developed into a major bushfire in the direction of Maryvale, a small section of the fire advanced in an Easterly direction along the Prince's Freeway Morwell Bypass. Evidence of burnt grass, shrubs and trees from this section of fire ended at the very edge of the Northern batter of the worked-out section of the mine. This is the area where the mine fire appears to have been of most concern.

To an untrained eye, this Morwell bypass fire 'tongue' is compelling evidence of the source of the mine fire. However, there is a belief amongst some community members that this 'tongue' of fire damage is evidence of fire escape from, rather than entry into, the mine.

#### The Mine Fire

I have been approached by a number of individuals who allege that the mine fire actually started in the mine and escaped onto the Morwell Bypass causing the damage there.

They claim to have spoken to Mine personnel who were on duty at the time of the fire. It is claimed that source of the mine fire was actually a common mine 'hot spot' that flared up in the hot windy conditions. That is, that the mine fire was not caused by the Driffield or Hernes Oak fires.

If not investigated in detail, these allegations have the potential to damage the credibility of the mine fire inquiry outcome.

#### 3.) Combating the Fire

#### Loss of Brown Coal Knowledge

Since privatisation, the Latrobe Valley Generator/Mining companies appear to have reduced the level of their staff with Brown Coal geological and mining expertise. This expertise includes behaviour of brown coal fires.

The former SECV held much of this expertise centrally in Latrobe Valley based groups. Upon privatisation this expertise was not decentralised to the new entities.

This loss of expertise became an issue when the Latrobe River broke into the Yalloum mine in 2007. As a result, the State government moved to create a body with the appropriate knowledge to act as an advice source for the Latrobe Valley mine operators. This body was to be based at the nearby Churchill campus of Monash University and to be funded to the tune of \$3.25 million over 5 years. See 2009 State government press release quoted in *Attachment A*.

This body may not have been established as it does not appear to have been available to provide advice during the subsequent 2010 Hazelwood Mine related Morwell Freeway Bypass 'cracking/slippage' and the 2011 Morwell River Diversion 'collapse' at Yallourn Mine. Further information may be available from the reports mentioned in the press clipping submitted as *Attachment B* which refers to expert criticism of mining operations in the Latrobe Valley.

It has been put to me that the Hazelwood mine operator does not employ a mine geologist. This apparent lack of expertise will be further commented on in the next section.

## Loss of Brown Coal Fire Fighting Expertise

As with Brown Coal Geological expertise, the Brown Coal fire fighting expertise and related 'corporate' fire fighting history of the SECV appears to have been lost on privatisation of the mines. This may be related to the adoption of a much more significant mine fire fighting role by the CFA.

I was rather puzzled to hear a CFA Hazelwood mine fire Incident Controller from outside Gippsland tell a large public meeting in Morwell that one of the difficulties in combating the mine fire was that CFA lacked knowledge of brown coal fires.

This is concerning as a quick mental calculation showed that I knew of four brown coal mines in that controller's home region. Two are worked-out and partially remediated, one is worked-out and unremediated (almost identical to the sections of the Hazelwood mine that burnt) and one is in daily operation and surrounded by heavy bushland.

This apparent lack of knowledge led CFA/MFB/Emergency Services to seek advice from black coal fire fighting experts from Queensland/NSW. My information is that black coal fires behave in a significantly different fashion to brown coal fires.

The interstate advice was sought despite the fact that many retired SECV brown coal experts are still resident in the Latrobe Valley. Many of these people are willing to provide advice. I have been contacted by one such person who offered his assistance to the Emergency Response Agencies and have heard of others who did so. The take-up of these offers was slow.

It is clear that, if CFA is to remain as the lead agency in mine fires, more extensive training in handling brown coal fires is required, particularly at the leadership level. The expertise to provide this knowledge and training still exists in the Latrobe Valley and should be utilised. I am aware that at least one such proposal has been put to the relevant authorities.

## Availability of Specialised Brown Coal Fire Fighting Equipment

The use of specialised foam fire fighting equipment that had to be shipped to the mainland from Tasmania, with attendant delay, appears to indicate that the CFA/MFB lacks sufficient units of this type of equipment.

The acquisition and basing of such equipment in the Latrobe Valley would appear to be an urgent necessity if the Valley communities and mines are to be protected from a repetition of the 2014 incident.

## Health Effects On Those Combating the Fire

I will leave this issue to those closer to the actual personnel involved, other than to say that I share the concerns expressed.

However, I will point out that, in all the discussions that have taken place, I have heard little reference to the mine workforce. This group assisted with fighting the fire for the duration and continued to operate the burning mine on a 24 hour basis. This ensured coal supply to maintain electricity generation from Hazelwood power station.

Any health effects suffered by Emergency Response Personnel will have been experienced in equal magnitude by these mine workers.

## 4.) Agency Response to Matters affecting the Community

#### General Agency Response

It would appear that, beyond the Emergency Response Agencies, State government departments and agencies are not prepared, or equipped, to provide the level of community support required in an emergency such as the mine fire. This is puzzling in light of what should have been learnt from previous major incidents such as Black Saturday. This situation must be corrected.

My view, and that of the many community members who have spoken to me, is that the 'second level' Agencies were tardy and inadequate in their response to the fire situation. Whether they were Health, Education or Environment Agencies, they took days or weeks to fully react and provide some level of support for the Morwell community 'on the ground'.

A detailed examination of the timeframes and extent of the community support provided by these agencies will show that their responses largely commenced well after the worst period of the fire had passed. Often these responses could be directly linked to media reports highlighting local anger and frustration at the lack of action. I make no apology for being responsible for some of this media activity.

Even then, the response was inadequate in many cases. For example, contact with "those at risk" such as the elderly, the incapacitated, the housebound who lacked mobility or support, only commenced three or four weeks into the fire event. This was well after the issue of government health warnings that these people were at risk. The fire was under control before some were contacted and the assistance offered did not include the evacuation/alternate accommodation that the government was recommending.

The handling of matters such as relief payments also seems to have been 'variable'. The government promised that the response would be sensitive and that agency officers would use 'discretion'. The volume of complaints that I received indicated that this area was a problem.

It was good to see the Police move quickly to acknowledge the health risk of mine fire emissions by relocating pregnant officers, or those attempting to start a family, from Morwell. Likewise, the staff in State Offices, including DHS, were quickly moved from Morwell. However, I cannot reconcile this laudable concern for state employees with the inaction in contacting and relocating those members of the community who were also 'at risk' and living 24 hours a day in the same area, often without the resources to leave.

## Air Quality/Fire Emissions Monitoring

It is very clear that the EPA was under resourced in both personnel and the equipment necessary to handle the emissions monitoring role. It is unclear as to whether this is the result of poor resource allocation or underfunding.

This lack of resources resulted in little detailed monitoring taking place during the worst period of emissions impact on the community. There is simply insufficient information available to quantify the impact on the people of Morwell during the first few weeks of the fire.

This lack of information, and the failed attempts to reassure the community, is the root cause of cynicism about Agency responses to the fire. It was also the catalyst for community demands for a long-term health study to monitor the unknown affects of the largely unmeasured emissions during this period.

For the first ten or so days of the fire there was no monitoring equipment in place in the worst affected area, the southern part of Morwell. It took much longer to get more specialised equipment in place when community concerns escalated.

Like the foam fire fighting equipment, some of the monitoring equipment was shipped in from Tasmania, with consequent delay. Why was suitable equipment not immediately available in Victoria?

The relatively basic level of monitoring for the first few weeks left an information vacuum. Many concerned individuals sought greater levels of information on likely fire emissions and their possible affect on the community. They were concerned that the appropriate depth of monitoring was not taking place and that appropriate levels of community protection were not being put in place. It does appear that levels of some potentially dangerous mine fire emission components were not measured when the fire was at its' worst, if at all.

Attachments 'C', 'D' and 'E' are extracts from emails received by me which show this concern. They were matched by a number of similar phone calls from different individuals. This particular group of individuals ranged from those having a high level of understanding, to those having industry and academic experience. Some would qualify as experts in the field of air quality.

Attachment 'F' is one of a number of similar emails that I received from community members. It was matched by a large number of personal and phone call representations. It is typical of the concern felt by community members who were concerned at the lack of information. Many of these people fell back on the internet for information. In the information vacuum, much credence was given to a Texan fire fighter who claimed emissions from brown coal fires were carcinogenic.

A number of community members have told me that their concerns about fire emissions were also heightened by rumours circulating that the Incident Control Centre had recommended evacuation of the town of Morwell. They claimed that this recommendation had been overruled "from above."

#### Communication

Communication with the Morwell community could largely be described as totally inadequate for about the first three to four weeks of the fire. Even the excellent scheme of doorknocking every house started much too late and was under resourced.

The various consultative committees that were set up with community representatives, did go some way to disseminating knowledge of what was occurring at the fire front, but proved ineffective in handling return advice about community concerns

What was largely missing was daily, publically available, clear, factual information from day one. The information vacuum that this created was then filled with 'social media' speculation which only heightened community concerns.

Throughout the mine fire all agencies had what they called "our comms people" at the forefront of their dealings with the community and the media. There was constant talk about "improving comms" but little actual improvement in community communication during those early weeks. The agency responses could be characterised as timid and 'Risk Averse'. The emphasis seemed to be on placating community concerns with platitudes rather than acting quickly and decisively and meeting concerns with facts.

As an example, the Chief Government Medical Officer produced a fact sheet which indicated that brown coal fire ash was largely harmless. This was on issue two days before EPA said that it had commenced collection and analysis of ash. The community conclusion was that the information must have been provided from a power station. Brown coal is burnt in power stations at much higher temperatures than the mine fire. The community concern was that the mine fire may have been producing health damaging compounds that would have been destroyed in the much higher temperatures of powers station furnaces.

As another example, I was an advocate of delivering an information package to each home in Morwell. That is, a separate fact sheet on each aspect of community concern such as, carbon monoxide, ash, particulates, availability of assistance, health advice, affect on pets, affect on garden vegetables, etc. This was to have a face sheet summarising the fire situation. I believe that such information packages were produced about 2 to 3 weeks into the fire but then not distributed and pulped.

Yet another example of this "comms" inaction was that it took many weeks before the advice to use existing 'junk mail' contractors to deliver fire newsletters to every home in Morwell was acted on. Prior to this, distribution was largely by internet, missing a large part of the community.

Another "comms" failing was to start referring to "Morwell South" as though it was a separate village that was the only area seriously impacted by the mine fire emissions. This backfired as the people of Morwell saw it for what it was – 'spin'. There is no "Morwell South." The area referred to is the southern part of Morwell and there is no boundary or break between this area and the rest of Morwell.

"Morwell South" was seen by the community as an underhand attempt to delineate the area to which assistance would be offered, as if mine fire emissions would stop when they got to a railway line. The EPA Pm2.5 mobile monitoring results graphs which show PM2.5 emissions as being very high on the southern side of the railway line and almost nonexistent a few metres away on the northern side stretch credibility.

It may be that government agency good "comms" practice has developed to the point that it now actually stands in the way of what is required —prompt dissemination of the facts.

The credibility of EPA was also was also hampered by their continually repeated claim that their first line of responsibility was to report to Health and Education agencies, not to the community. Whilst this may be government policy, it does not seem to grasp the importance of keeping the community informed during an emergency situation that is directly impacting them. Failure to do this leads to rumour replacing fact and to heightened community concern.

The failure to provide fully detailed information on the EPA website for the first few weeks also led to community concern and adverse speculation. I have been advised that in the first (worst) week of the fire the EPA website showed Morwell air quality as "good".

An investigation of information and advice dissemination by the various agencies, including the effectiveness of the content and the timeframes and method of distribution is warranted. Hopefully this will provide lessons that can be applied to the next Hazelwood type incident.

#### The Clean-up and Recovery Period

This is process is continuing while this submission is being written.

Problems such as the failure of Insurance companies to pay out on claims until the fire is officially declared 'out' (it has not been) are still being worked through.

On the positive side, consultation is continuing as to the form of the long term health study of those exposed to fire emissions and the State funded works to give Morwell a post fire 'lift'. It may be that, for future incidents such as the Mine Fire, the multi committee model of addressing specific aspects of community recovery can be improved upon.

The Major community criticism has been that the ash clean-up assistance to households was not comprehensive enough, nor covered a wide enough area. Home cleans for those who were not HACC eligible were limited to the artificial "Morwell South" area. Even then, they did not cover roof spaces, soft furnishings, car ports/garages, outbuildings and solar roof panels.

This means that many people inside, and outside, the designated area will face considerable cost in completing their own clean-up.

The clean-up model was worked out at bureaucrat level without input by community representatives. No doubt this was also done within budget constraints but the community reaction underscores the shortcomings of such methods.

# 5.) Suggestions for Prevention of a Recurrence of this Type of Incident

The following points are offered for consideration after all matters relating to the mine fire have been examined:

## A Ban on Opening New Mines close to Morwell

The Hazelwood Mine fire has shown how dangerous a fire in a brown coal mine close to a town can be. Unfortunately there are proposals to mine other areas close to the town of Morwell.

The extent of Latrobe Valley and Gippsland coal resources are such that there would be little economic downside to ensuring that Morwell is not again threatened by a fire in a nearby mine.

The State government designated 'Area H' sits south of the railway line between Morwell and Traralgon, occupying almost all this area. The State government report 'LV2100' identifies this area as one to be mined in the near term.

A fire in an 'Area H' mine would threaten both Morwell and Traralgon. The fact that this area has not been allocated to a mining company means there would be no direct cost to the State in banning mining in this area.

Even closer to Morwell, Energy Australia holds licences to mine along the western (Latrobe Rd) boundary of the Morwell town. A fire in this mine would be a repeat, if not worse than, the experience of the Hazelwood Mine fire.

A solution would be for the State to allocate to Energy Australia the (unallocated) coal block that stretches east from the existing Yallourn mine workings through Morwell North/Derham's Flats (district) towards Maryvale mill, in exchange for the existing licences.

## Remediation of the Hazelwood Mine

The mine fire essentially occurred in the exposed coal surfaces of the worked-out section of the mine nearest the town. The fire had a much reduced affect on the remediated (i.e. exposed coal surfaces covered with clay/soil) section of the mine in that area.

It is very clear that the remediation of the worked-out section of the mine would dramatically reduce the chance of fire in this area, thus reducing the danger of fire emissions to Morwell.

Improvements in Fire Fighting and Fire Prevention Measures.

An examination of fire fighting issues raised above should highlight any shortcomings and need for change in current practice, knowledge and equipment.

Improvements in 'Agency' Response to Such Emergencies.

An examination of the issues raised should point to the need for a 'Rapid Response' strategy, with appropriate resourcing, for the second-line Response Agencies.