

SUMMARY OF DISCUSSIONS BETWEEN ROBERT GAULTON (RG) AND RICHARD WISEMAN (RW) AND REPRESENTATIVES OF MINE FIRES INCIDENT CONTROL (IC) AT TRARALGON ON WEDNESDAY 19TH FEBRUARY 2014

Barry Voss (Incident Controller) effected introductions and facilitated an overview of incident control activities and progress with fires before needing to leave for another engagement. Delegated discussions with RG and RW to Kevin Pettit. (KP) - CFA Operations/Performance Improvement Manager and Incident Planner,

KP further detailed situation and challenges confronting IC. Indicated significant progress with surface combustion but conceded ongoing vulnerabilities related to weather and lack of substantial reticulated water.

RG/RW advised that in their experience, massive and consistent quantities of water will be required to effectively and permanently quell surface combustion of exposed brown coal. Intermittent and sporadic application of water has minimal impact and may even act to worsen situation by helping spread burning particles. Application of water also generates CO in such circumstances.

KP conceded water problems experienced due to lack of available reticulated supply.

RG advised that exclusion of oxygen likely to be as important as wetting down, particularly with regard to sub-surface combustion. Explained that coal seam is heavily jointed and in places heavily fractured. As such, oxygen may be drawn from remote points of ingress hundreds of metres away from burn zones to sustain below surface combustion. This means that oxygen exclusion activities need to be applied over a broad area, in places well beyond directly fire-affected areas.

KP agreed with this observation and explained current frustrations and difficulties in extinguishing combustion in open coal joints and fissures.

RG noted that excessive water ingress into coal may have deleterious impacts on stability, especially with regard to triggering local movements that could result in further cracking and additional points of ingress for oxygen.

RG/RW enquired of KP about the use of additives such as foam or gel polymers in fire fighting water that might act to help preclude or limit oxygen intake across broad areas.

KP indicated trials had taken place with mixed results.

RG/RW suggested that, on past experience, surface combustion is likely to eventually be controlled by standard dousing practices but that sub surface combustion is likely to emerge as a long term challenge that will present ongoing vulnerabilities.

KP invited suggestions to help remediate the situation would be welcome.

RG/RW suggested that steps be taken to exclude/limit oxygen to the areas impacted by the fire by ensuring that all relevant levels were sheeted with compacted clay. Faces are more difficult to treat but could and should be smothered with substances more robust and enduring than water – ranging from foam/gel polymer to 'shotcrete'.

Discussion took place regarding known application of shotcrete to high road cuttings and other steep surface embankments. Possible advice from Vicroads to be sought. Experimentation with viscosity and nature of materials to be applied will be required. Possibility of using bentonite clay (drilling mud) cement mixture discussed as a cheaper alternative to full shotcrete. Advice to be sought from Drilltec in Morwell re availability of such.

KP indicated acceptance of above suggestions as worth investigating/pursuing.

RG noted expression of community concerns re nature/chemical composition/impact on health of residents. Suggested IC need to acquire credible information on ash composition, by- products of combustion etc. to help inform public and allay fears. Suggested Hazelwood Power Station could supply requisite data. Left published information (Science of Brown Coal Book) on brown coal/ash quality and by products of combustion with KP.