Queensland
Government

Department of
Natural Resources and Mines

30 January 2017

BY EMAIL: To all Coal Underground SSEs and UMM's

Dear SSE and UMM

Re: Methane levels in Underground Roadways

The inspectorate has identified incidents of occurrences of methane in LW tailgates in excess of 2.5%.

Occurrences of this kind are prescribed under Schedule 1C of the Coal Mining Safety and Health Regulation 2001 (the Regulation) as high potential incidents which SSEs must, under section 198 of the *Coal Mining Safety and Health Act 1999* (the Act), report to an inspector.

The incidents referred to above were not identified or reported as required.

Following investigation by the inspectorate it appears that the regulation, in these instances, was not applied correctly nor was the risk from this hazard adequately identified or managed.

I wish to make it clear that if a roadway in a mine contains an atmosphere equal to or greater than 2.5% methane it is dangerous under section 366 of the Regulation. If a roadway is dangerous then Coal Mine Workers must under section 273 of the Act be withdrawn to a place of safety.

Where a return airway is identified as an Explosion Risk Zone Zero (ERZ0) under section 287 of the Regulation, it does not preclude people (purely by identifying the roadway as ERZ0) from working or travelling in the roadway.

However, the requirement for providing "controlled ventilation" (section 344 the Regulation) still applies in a roadway that is an ERZ0 – it is not exempt from that requirement by section 345 of the Regulation.

The categories for explosion risk zones in the Regulation were originally designed to identify those areas of a mine where electrical equipment and diesel machines may be operated subject to specified controls.

Any roadway that is an explosion risk zone is still subject to the obligation under section 343 of the Regulation to ensure that the mine's ventilation system provides for methane concentrations of not more than 2.5% methane.

To be clear, if any roadway or place is categorized as ERZ0 because of methane levels, it also has an upper limit of 2.5% methane before coal mine workers must be withdrawn to a place of safety.

Ensure your Safety and Health Management System (SHMS) is based on this basic premise and that controls have been implemented to prevent a general body concentration of methane occurring in any roadway or place that is equal to greater than or 2.5%.

The inspectorate will in the near future undertake audits of gas management systems at all underground coal mines. The district inspectors will be requesting access to gas monitoring data and gas management plans as a part of this process.

If systems are found to be inadequate directives, if required, will be issued to correct the failings.

If there are any further queries or clarifications required, please contact myself or a fellow Inspector.

Yours sincerely

Russell Albury
Chief Inspector of Coal Mines