

SAFETY BULLETIN

DATE: OCTOBER 2021

Incident investigations

Issue

Following a serious methane gas ignition incident at the Grosvenor mine, a Queensland Coal Mining Board of Inquiry was set up to:

- determine the nature and cause of the serious accident at longwall 104 on 6 May 2020
- inquire into the probable cause of 40 methane exceedances which occurred between 1 July 2019 and 5 May 2020
- assess the adequacy of operational practices and management systems at the mines involved and at corporate level in relation to incidents
- make recommendations for mine operators, relevant obligation holders and other relevant parties for improving safety practices to mitigate against the risk of similar incidents in the future.

Circumstances

The Board of Inquiry released its report in two parts. Part 1 had several recommendations regarding incident investigation and mine operators informing parent companies of incidents. Recommendations 1, 2, 7, 8 and 9 are considered relevant and are detailed below.

Recommendation 1

Mine operators and parent companies regard, and action, a reportable methane exceedance as having a potential consequence of level 4 or level 5 under corporate incident classification criteria.

Recommendation 2

Mine operators and parent companies escalate the treatment of repeat high-potential incidents of a similar nature and ensure a more rigorous investigation than for a single high-potential incident. Reporting and investigation standards and procedures formally reflect this requirement.

Recommendation 7

Mine operators and parent companies classify all methane exceedances at or above 2.5% concentration in the general body as HPIs for internal incident reporting purposes.

Recommendation 8

Mine operators and parent companies treat such methane exceedances as indicating that a critical control may have failed, and undertake an investigation into the performance of the relevant critical control to determine if that is so.

Recommendation 9

Mine operators and parent companies ensure that such methane exceedances are formally notified as soon as possible to senior executives of the parent company.

Investigation

The NSW Resources Regulator has carried out a review of the Board of Inquiry's recommendations and determined that several are applicable to NSW coal mines. The above recommendations are directed at mine operators and parent companies of the operator. We support those recommendations.

It should be noted that in recommendation 1, the referenced potential consequence levels 4 and 5 are at the top end of potential consequences – fatality or multiple fatality. Recommendation 7 is based on the Queensland legislation of a methane exceedance being above 2.5%, whereas in NSW it is above 2%. Both states class them as high potential incidents, but some parent companies do not report them internally as high potential incidents.

Recommendations

Mine operators and the parent companies of mine operators should:

- Consider the use of a standard potential consequence for methane exceedances in their investigation process. It should be at the upper end of the consequence matrix.
- Consider whether the investigation process requires increased scrutiny of previous investigations and actions taken when repeat events occur.
- Consider whether their systems have an appropriate trigger for notifying incidents to the corporate level. Keeping the information on site may result in information and learnings not being shared with other sites, not getting higher level assistance or may impact on officers' requirements to carry out due diligence.

- Consider whether the incident investigation process reviews the potential for failed critical controls to have contributed to the incident and, if they have contributed, review the performance of those critical controls.

NOTE: Please ensure all relevant people in your organisation receive a copy of this safety bulletin and are informed of its content and recommendations. This safety bulletin should be processed in a systematic manner through the mine's information and communication process. It should also be placed on the mine's common area, such as your notice board where appropriate.

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