

## INQUIRY INTO COAL MINING INDUSTRY SAFETY

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*Resourcing Queensland's future*

5 October 2022

Committee Secretary  
Transport and Resources Committee  
Email: [trc@parliament.qld.gov.au](mailto:trc@parliament.qld.gov.au)

Dear Committee Secretary

Please find attached a submission from Queensland Resources Council (QRC) to the Queensland Parliament's Transport and Resources Committee Inquiry into Coal Mining Industry Safety.

Should you have any queries regarding this submission, please contact:

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Yours sincerely

Ian Macfarlane  
**Chief Executive**

# QRC Submission

**Submission to the Queensland Parliament's Transport and  
Resources Committee Inquiry into Coal Mining Industry  
Safety**

**5 October 2022**

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## Introduction

The Queensland Resources Council (QRC) is the peak representative organisation of the Queensland resources sector, with a membership that encompasses minerals and energy exploration, production and processing companies, as well as associated service companies. The QRC works on behalf of its members to ensure Queensland's resources are developed profitably and competitively, in a safe, socially responsible and environmentally sustainable way.

The QRC submission addresses general industry wide issues relating to the outcomes of the Coal Mining Board of Inquiry (BOI). Individual companies will provide specific comment on the BOI findings and recommendations in the context of their unique risks associated with their mines and business operations.

The Queensland resources sector is committed to continuous improvement in all areas of work health and safety and follows a best practice, risk-based approach to managing risks of work-related injury and disease. The resources industry recognises that there is no competitive advantage in safety and acknowledges the importance of continuing to co-operate and share information, research and learnings.

### ***BOI Recommendations Referred to the QRC by the Minister***

At the request of the Minister for Resources, the Honourable Scott Stewart MP, the Queensland Resources Council has worked with industry to address certain recommendations from the Part I Report of the BOI.

Two working groups were established. A Lead Indicators working group was established to address recommendations 18, 23 and 24 of the Part 1 of the BOI Report while the second working group, Methane Exceedances and Classification, was established to address recommendations 1, 2, 7, 8, 9 and 10 of the Part 1 of the BOI Report. The Commissioner for Resources Safety and Health, Kate du Preez, has also played a role in facilitating these groups.

In relation to recommendations 18, 23 and 24, a full day lead indicators workshop was held on 30 November 2021. The workshop was held as both a face-to-face event at Queensland's Parliamentary Annex and online with 331 participants registering for the workshop. A total of twelve presenters covered off on various approaches and experiences in implementing lead indicators rather than relying on lag indicators. The workshop provided the opportunity to share information, consider different metrics and, for companies to benchmark their progress against others and to consider the latest research.

In relation to recommendations 1, 2, 7, 8, 9 and 10, the working group agreed that methane exceedances are not inevitable when the systems installed are working as designed and mining activities are within the scope of what would normally be encountered. A methane exceedance of any description should attract an investigation to understand the root causes of the exceedance, which then should be escalated regarding the potential consequences.

The Methane Exceedances and Classification working group agreed that information should be made available on what individual underground coal mine operators are doing to manage methane exceedances going forward, the classification of exceedances and when the exceedances are escalated to a higher level in the company.

The underground coal mining companies met with the Honourable Minister for Resources, Scott Stewart MP, at the Moranbah North mine site on 21 September 2021, where the Minister was briefed on goaf drainage systems for the management of methane and other matters. The format for the meeting involved senior executives and technical staff from each company presenting on their

unique risks they have and how they approach methane management including ongoing research and development. The meeting noted substantial research and modelling has been and continues to be undertaken to ensure there is adequate spare capacity in goaf drainage systems, above the predicted maximum methane emissions (recommendation 10).

The companies are continuing to monitor their unique risks to ensure there is adequate spare capacity in goaf drainage systems and undertake research. This will be addressed in company submissions to the Inquiry.

As outlined above, Coal mining companies have responded to the outcomes of the Board of Inquiry in a timely and decisive manner taking account of the unique health and safety risks and operating arrangements at each coal mine.

### **Terms of Reference (c): Timely identification, classification and reporting of incidents and failures of risk controls**

#### **2021 Safety Resets**

At the request of the Minister for Resources, the Honourable Scott Stewart MP the resources industry actively participated in the “2021 Safety Reset” which was based on the theme of *Chronic unease: improving safety culture through better hazard and incident reporting*. The 2021 Safety Resets focused on building an industry culture involving open and comprehensive reporting and investigation of incidents and near miss events, to encourage hazard identification and risk control.

The 2021 Safety Reset took place in over 190 workplaces and with over 1,000 reset sessions being conducted. Through these Resets resources companies were able to reinforce to their employees, contractors and labour hire workers, the need for an ongoing focus on identifying hazards, investigating incidents thoroughly, and applying effective risk control measures. Importantly, there was a focus on the importance of “speaking up” where an employee, contractor or labour hire workers considers the work activity unsafe.

#### **High Reliability Organisation Principles**

On 8 July 2019 Dr Sean Brady was commissioned by the then Department of Natural Resources, Mines and Energy to carry out a review into all fatal accidents in Queensland mines and quarries from 2000 to 2019. Dr Brady recommended the resources industry should adopt the principles of High Reliability Organisational (HRO) theory in order to reduce the rate of serious incidents and fatalities. At its most basic level, HRO theory focuses on identifying the incidents that are the precursors to larger failures and uses this information to prevent these failures occurring.

The QRC through its member companies sought information on the implementation of HRO principles within the resources industry. This included information on identifying existing practices that align with HRO principles but are called different things and practical ways for HRO principles to be adopted across the Queensland’s resources industry. The Noetic Group was engaged by the QRC on 8 April 2021 to undertake a HRO Benchmarking Project with financial support from the Commissioner for Resources Safety and Health, the QRC and participating companies to provide practical ways for HRO principles to be adopted across the Queensland mining industry, and to better understand and identify existing practices that align with those principles.

The Noetic Group’s approach was to work with a sample of eight companies including coal, metals and contracting companies. A matrix of HRO attributes with mining industry examples was developed for companies to note how they thought they were achieving (or not) each attribute. This matrix was then reviewed at site to allow greater understanding of the application of HRO principles in practice. This data along with other sources of information was then used to develop the project report which included an independent assessment of the implementation of HRO practices and systems.

Noetic found a range of company practices used at the visited sites were similar to those used by organisations which are often cited as being HROs. Examples ranged from the incident and hazard reporting systems to the risk management arrangements including the critical control approach. These arrangements are underpinned by safety, training, maintenance and other management systems. These systems are not catalogued in the Noetic report but are necessary for the adoption of HRO principles. The report focuses on how well certain practices align with HRO principles and how implementation of these practices might be improved to better adopt them. The report uses case studies identified during site visits to provide learnings that support industry-wide adoption. The learnings are aimed at senior leaders in companies and at site, which it is believed will encourage broader adoption of HRO principles throughout a company.

To support the adoption of HRO principles, Noetic provided a roadmap that can be used by the resources industry. The roadmap is based on the following learnings:

**Learning 1:** Improve understanding of the value of critical controls in preventing serious accidents and improve implementation to provide greater clarity on control 'health'. This should take into account existing published guidance;

**Learning 2:** Encourage the reporting of a wider range of situations including weak signals. This should consider the published guidance documented in "Practical Guide to becoming a High Reliability Organisation";

**Learning 3:** Reduce emphasis on lagging indicators such as LTIFR and TRIFR;

**Learning 4:** Increase the use and communication of leading indicators directly relevant to managing hazards. Guidance is required on the strengths and weaknesses of certain leading and lagging indicators;

**Learning 5:** Encourage predictable, reliable operations to prevent unwanted safety outcomes. This should take into account approaches to operational planning and decision-making which consider the system as a whole;

**Learning 6:** Improve incident investigations to explicitly review and revise critical control design and verification;

**Learning 7:** Share best practice on incident investigations;

**Learning 8:** Give organisational expectations, practices and performance on managing principal hazards equal prominence to other workplace safety and health issues; and

**Learning 9:** Provide guidance for the most senior leaders on good practice in managing low probability, high consequence events including principal hazards.

The learnings and outcomes were presented to participants and QRC member companies via a webinar. All companies received a copy of the report and are considering it in the context of their differing operating systems. A copy of the Noetic Report is attached for consideration. The Noetic report was distributed widely across the resources industry and is available on the QRC website.

While HRO principles are and will continue to be called by differing terms in the industry, the Noetic report provides a roadmap that is being used to confirm that systems are being maintained. This ensures the timely identification, classification and reporting of, and effective responses to incidents.

**Terms of Reference (d) Appropriateness and potential safety impacts of the use of labour hire; and labour hire workers' roles in on-site safety at coal mines**

Queensland’s coal mining industry has safely integrated a workforce comprised of permanent employees, contractors (large and small) and labour hire workers. While it is inferred in Chapter 11 of the BOI Report that was based on the literature review by Professor Quinlan, that labour hire and contract work arrangements are associated with a higher incidence of injuries and fatalities. This view is not supported with respect to Queensland’s coal mining industry data. While Resources Safety and Health Queensland (RSHQ) does not breakdown the data between contractors and labour hire workers, the most recent available fatality and injury rate data (per million hours worked) from RSHQ, shows:

**Mining Fatality Rates (Fatalities per million hours worked)**

	2016-17	2017-18	2018-19	2019-20	2020-21
Contractors (incl labour hire)	0.02	0.02	0.02	0.02	0.00
Employees	0.02	0.00	0.08	0.04	0.00
All workers	0.02	0.01	0.05	0.03	0.00

**Mining Serious Accident Injury Rates (serious injuries per million hours worked)**

	2016-17	2017-18	2018-19	2019-20	2020-21
Contractors (incl labour hire)	0.08	1.1	1.1	1.0	0.56
Employees	0.9	0.7	1.0	0.6	0.74
All workers	0.8	0.9	1.1	0.8	0.65

It is important to understand the distinction between labour hire workers and contractors, viz labour hire workers work under the control of the host, while contractors perform short/long term and specialised tasks/projects. Contracting covers a broad range of situations from the large, sophisticated contractors who may have a contract to operate a mine with their own permanently employed workers including specialist statutory positions, through to the contractors who are engaged to maintain draglines where they attend the mine site for a specified period of time.

While both can be characterised by a contract, they are very different forms of employment and cannot be grouped together when assessing safety risks. While labour hire workers are integrated into the mines’ workforce, contractors and their workers are not. For example, a contractor undertaking a longwall move will have management and control of the project, and management and control of their workers and any specialist contract workers they engage. This is quite different from the labour hire workforce who will work alongside permanently employed workers, be dressed in the same uniforms, be trained on the mine’s safety and health management system and work under the management and control of the SSE and mine managers.

The assertion in paragraph 11.33 of the BOI Part 11 Report that an advantage of the use of labour hire is that it enables “the marginalisation of the union, which serves to limit the risk of increased work stoppages through industrial disputes, reduced productivity and higher labour costs” is not supported by evidence. No labour hire worker is prevented from joining a trade union. Further the suggestion at paragraph 11.40 that labour hire workers can be used to substitute an existing workforce with one which is more likely to be compliant because of the temporary nature of their engagement and that there is less likely to be an investment in training and development of labour hire workers, again is not supported by evidence. If coal mining companies were to encourage a compliant workforce not prepared to voice safety and health issues or they did not receive appropriate training and development, then it is expected they would have significantly higher injury rates than the permanent workforce they work alongside.

All workers at a mine whether they are unionised or non-unionised will have access to Site Safety and Health Representatives (SSHRs) who play an important role in maintaining safety and health at a mine site. The SSHRs have wide ranging powers set out in s.99 of the CSMH Act, including inspections, reviews of procedures and the investigation of complaints. If an SSHR is of the view that a safety and health management system is inadequate or ineffective the SSHR must advise the Site

Senior Executive. If the SSHR is not satisfied with the response, they must advise an inspector. The Site Senior Executive and supervisors must give the SSHR reasonable assistance in carrying out their functions.

The literature review conducted by Professor Quinlan for the BOI was not targeted at the resource industries, it applies generally to workplaces around Australia and internationally. It does not take account of the unique characteristics of labour hire arrangements in Queensland's coal mining industry. There is little to be gained by comparing a metals manufacturing business in Victoria that engages five labour hire workers for a month due to increased production demand with a Queensland coal mine where the labour hire workers may have worked for three years, have been inducted and trained and work under an overarching mines safety and health management system.

The references to the outcomes of the 2019 Safety Reset then goes on to say that *"Given the small number of respondents, which represented around only 1% of the workforce, the results must be treated with caution."* While the findings may be similar to the outcomes of other studies, there are no research findings to suggest that labour hire workers in Queensland's mining industry feel disempowered to raise concerns. It is important to note that 99% of the workforce did not consider that there were sufficient issues to warrant a response to the Safety Reset on-line survey.

There was no evidence put before the Board of Inquiry that identified any adverse safety impacts associated with the use of labour hire or contractors at coal mines. In fact, at paragraph 11.49 the Board of Inquiry noted, *"There has been only limited research into whether the use of labour hire and contract labour has affected occupational safety outcomes in Australian and New Zealand mining"*. In order to better understand the potential safety impacts of the use of labour hire workers and or contracted workers it is essential that there is a breakdown in the RSHQ fatality and injury data between contractors and labour hire workers. A distinction between these two cohorts will better inform an evidenced based approach to policy development.

**The QRC strongly urges the Resources and Transport Parliamentary Committee to recommend that:**

- 1. the tripartite Coal Mine Safety and Health Advisory Committee undertake research into whether the use of labour hire and contract labour has affected occupational safety outcomes in Queensland; and**
- 2. Resources Safety and Health Queensland break the injury data down between contractors and labour hire workers to ensure evidenced based policy development going forward.**

The QRC is becoming increasingly concerned with the amount of prescriptive legislation being imposed on managers and workers under Queensland's *Coal Mine Safety and Health Act 1999*, which has the potential to drive safety critical workers out of the industry. Most recently we have seen the introduction of industrial manslaughter legislation and more recently proposed legislative amendments that if passed by Parliament, will mandate the employment conditions of statutory position holders, who undertake important safety critical roles under the legislation. Safety is best addressed with risk-based legislation, supported by a strong focus on leadership and workplace culture to drive improved safety outcomes.

In this context, the QRC is strongly supportive of Finding 91 of the Coal Mining Board of Inquiry that found an extensive study undertaken by CSMHAC on reporting culture in coal mines would benefit the industry in Queensland. The QRC is pleased that the Coal Mining Safety and Health Advisory Committee, in conjunction with the office of the Commissioner for Resources Safety and Health and the Mining Safety and Health Advisory Committee, have acted on this finding and will conduct a survey in 2022-23 on the reporting culture of the Queensland mining industry. The survey objective is to establish a baseline for the reasons why workers do or do not report high potential incidents (HPIs), near misses and early warnings, and to better understand reporting practices including



potential barriers and opportunities. The survey outcomes will enable companies to develop strategies to improve workplace culture and the reporting of HPIS, near misses and early warnings.

In conclusion, the QRC would like to restate its position that the Queensland resources sector is committed to continuous improvement in all areas of work health and safety and follows a best practice, risk-based approach to managing risks of work-related injury and disease. The resources industry recognises that there is no competitive advantage in safety and acknowledges the importance of continuing to co-operate and share information, research and learnings.