



Inquiry into coal mining industry safety

Report No. 29, 57th Parliament
Transport and Resources Committee
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Transport and Resources Committee

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Chair's foreword

A 2019 study found that the Queensland mining industry has the third-highest work-related fatality by industry rate. The 2020 Grosvenor Mine serious accident, which saw five workers catastrophically injured in a gas explosion near Moranbah, resulted in the Queensland Coal Mining Board of Inquiry. The Board of Inquiry made numerous recommendations aimed at improving coal mine safety. However, workers continue to be killed at coalmines. Since the Board of Inquiry, three men have lost their lives due to accidents in Queensland mines. Their deaths were utterly preventable. Prior to entering Parliament, I have worked as an electrician on mine sites. I am keenly aware that mines are dangerous places, but I also understand that safety management systems that are effectively designed, implemented, followed and audited, can minimise incidents and injuries. Multi-national companies and single site operators alike make substantial profits from their Queensland coal mine operations. The productivity of these mines must never come before the safety of their workers.

During our inquiry, the committee observed a theme that has permeated multiple government inquiries into safety in the mining sector. Companies speak loudly about their overriding commitment to safety, while individual workers find themselves having to 'speak up for safety', sometimes at significant personal cost to themselves, due to the perceived threat of reprisal. Risk-based legislation absolutely plays a role in upholding mine safety, but only truly tripartite and ongoing collaboration and information sharing between industry, workers, workers' representatives, and the regulator will guarantee it.

During our inquiry, we had the opportunity to visit the Grosvenor Mine, and see for ourselves the conditions in which underground coal miners work. I'd like to thank Anglo American for hosting us on 1 November 2022 during that visit. We also held public hearings in both Moranbah and Brisbane, and I wish to thank those witnesses for their time and helpful insights. Finally, I thank those individuals and organisations who made written submissions to the committee. I also thank our Parliamentary Service staff and Resources Health and Safety Queensland for providing departmental assistance.

I commend this report to the House.



Shane King MP

Chair

Recommendations

Recommendation 1	13
Surface coal mine operators in Queensland report to RSHQ regarding their implementation of all recommendations in the BOI reports which are relevant to surface operations by 30 June 2023, to allow RSHQ to review compliance with BOI recommendations by all Queensland coal mine operators;	
Recommendation 2	23
The CMSHAC ensure that a genuinely tripartite consensus is arrived at regarding the full-time nature of the SSHR role at Queensland mine sites; industry should subsequently give full effect to the settled tripartite position;	
Recommendation 3	23
The Minister consider what forums and mechanisms can be used to improve the quality of tripartite communication around Queensland coal mining health and safety;	
Recommendation 4	27
The CMSHAC commission independent research into the impact of coal production rates on safety risk management in Queensland coal mines. Coal mine operators must facilitate sufficient access to, and protections for, members of their workforce who participate in this research;	
Recommendation 5	32
The QRC’s lead indicators working group advance discussions on the appropriate use of safety metrics by industry in calculating employee bonuses, and provide a benchmarking report by end November 2023 to the CMSHAC;	
Recommendation 6	45
The Minister consider reviewing the rate of the regulatory health and safety fee payable by coal mine operators, to support an increase in resourcing to the coal mines inspectorate within RSHQ for an expanded compliance and enforcement program;	
Recommendation 7	45
RSHQ increase the number of unannounced inspections it undertakes at Queensland coal mines to 25% of all inspections by the 2023/24 financial year;	
Recommendation 8	55
The CMSHAC review the terms of reference for its current study into coal mine safety reporting culture to additionally address the deficit of research around production and safety conflicts, and reprisal against workers who raise safety issues, which we have raised in this report;	
Recommendation 9	55
The QRC ensure that its coal mine operator members proactively engage and supply data to assist with the research to be conducted by the CMSHAC. The QRC is to report on its website which coal mine operators have participated and data on each coal mine operator’s participation (e.g. number of workforce engaged, employment basis of participants, work role of participants) by end November 2023;	

Recommendation 10

55

The Minister consider amendments proposed in the Consultation Regulatory Impact Statement strengthening protections against reprisal with a view to legislatively implementing them;

Recommendation 11

59

Conduct genuinely tripartite Safety Reset sessions for the Queensland coal mine industry at least biannually, and preferably annually.

Executive Summary

There are 66 operating coal mines in Queensland, mainly located in the Mackay and Central Queensland regions. Fifty-three are open cut surface mines and 13 are underground.¹ These mines produced 276.5 million tonnes of raw coal in 2021-2022.² There are 40 operators of underground and surface coal mines in Queensland; three different multinational operators operate almost a third of these.³

Since 2020, the Queensland coal industry has benefitted from unprecedented high coal prices, making a profit of \$71.8 billion in the 2021-22 financial year, compared to \$24.7 billion the previous year. This accounted for 70% of the value of total Queensland resource exports in 2021-2022.⁴ Queensland offers an attractive environment for investment in coal, with several competitive advantages including its high-quality hard coking coal, proximity to the fast-growing Asian region, efficient supply chain, good infrastructure, and skilled workforce.⁵ Numerous announcements since mid-2022 of substantial investments or acquisitions in the Queensland coal industry indicate coal producers' ongoing confidence and appetite to invest in Queensland, notwithstanding recent industry criticism regarding the implementation of the Queensland Government's new three tiers in the coal royalty structure, announced in the 2022-23 state budget.⁶ In 2021 there were 44 announced coal projects in Queensland, of which seven were expansions of existing projects and 37 were new projects.⁷ In 2022, the total number of announced coal projects in Queensland increased to 46.⁸

Increases in coal production and projects requires an unerring commitment to safety risk management. Since 2000 there have been 26 fatalities in Queensland coal mines.⁹ Each mine worker death is a preventable tragedy. There were four work-related coal mine worker fatalities during 2020-2022:

- Mr Donald Rabbitt was fatally injured at Curragh Mine on 12 January 2020, when an earthmoving tyre fell on him during the process of removing the tyre
- Mr Graham Dawson was fatally injured at Crinum Mine on 14 September 2021, while conducting strata support work in a conveyor drift with two other workers, one of whom was seriously injured in the incident

¹ Submission 15, p 3.

² Queensland Government, Queensland Treasury, *A Study of Long-Term Global Coal Demand*, [³ Submission 15, p 3.](https://www.treasury.qld.gov.au/resource/a-study-of-long-term-global-coal-demand/#:~:text=Queensland%20Treasury's%20analysis%2C%20as%20outlined,production%20and%20major%20export%20markets,p 2.</p></div><div data-bbox=)

⁴ Queensland Treasury, *A Study of Long-Term Global Coal Demand*, p 3.

⁵ Queensland Treasury, *A Study of Long-Term Global Coal Demand*, p 10.

⁶ Queensland Resources Council, 'More coal companies speak out against Qld Govt royalty tax hike', media release, 18 August 2022, <https://www.qrc.org.au/media-releases/more-coal-companies-speak-out-against-qld-govt-royalty-tax-hike/>

⁷ Australian Government, Department of Industry, Science and Resources, *Resources and Energy Major Projects*, 20 December 2021, <https://www.industry.gov.au/publications/resources-and-energy-major-projects-2021>

⁸ Australian Government, Department of Industry, Science and Resources, *Resources and Energy Major Projects*, 19 December 2022, <https://www.industry.gov.au/publications/resources-and-energy-major-projects-2022>

⁹ Queensland Government, *Fatal accident details for Queensland coal mines from 1882 to the present*, https://www.resources.qld.gov.au/__data/assets/excel_doc/0014/240260/fatalities-queensland-mining-industry-1877-present.xls

- Mr Clark Peadon was fatally injured at Curragh Mine on 21 November 2021, while undertaking dragline cable support duties, after being struck by a dragline propel shoe
- Mr Gavin Feltwell was fatally injured at Moranbah North Mine on 25 March 2022, while dismantling conveyor equipment underground.

Additionally, during 2021-2022, 1541 workers sustained injuries that required treatment as a hospital inpatient, including specialised and intensive care, and a further 592 cases of mine dust lung disease were reported.¹⁰

A 2019 review of all 47 worker fatalities in Queensland mines and quarries between 1 January 2000 to 31 July 2019 (the Brady Review) found that a large number of fatalities involved inadequate training of workers; controls meant to prevent harm were ineffective, unenforced or absent with no, or inadequate, supervision. The Review found almost all of the fatalities were the result of systemic, organisation and supervision of training failures. Human error alone would not have caused these fatalities.¹¹

While the fatality rate of Queensland’s coal mining industry is decreasing in the 21st century,¹² the Brady Review identified a pattern whereby the mining industry goes through periods of increasing and decreasing vigilance, which can lead to failures and fatalities (referred to as “a drift into failure”).¹³ That failure was evident in the serious accident that occurred at Grosvenor Mine on 6 May 2020, when five mine workers were catastrophically injured by an underground explosion of methane. This event led to the Queensland Coal Mining Board of Inquiry, and this inquiry is concerned to understand how the Queensland coal mining industry has responded to the findings and recommendations of the Board of Inquiry. This inquiry pays particular attention to the way that industry is managing the impact on safety risk management of: coal production rates; safety-related bonuses; incident identification, classification and reporting, and risk controls; use of temporary workers including labour hire and contract employees; and general site safety measures.

Introduction

1.1 Role of the committee

The Transport and Resources Committee (committee) is a portfolio committee of the Legislative Assembly that commenced on 26 November 2020 under the *Parliament of Queensland Act 2001* and the Standing Rules and Orders of the Legislative Assembly.¹⁴ The committee’s primary areas of responsibility are:

- Transport and Main Roads
- Energy, Renewables, Hydrogen, Public Works and Procurement
- Resources.

¹⁰ Resources Safety and Health Queensland, Annual Report 2021-22, p 6.

¹¹ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland’s Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 7.

¹² Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland’s Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 18.

¹³ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland’s Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 12.

¹⁴ *Parliament of Queensland Act 2001*, s 88 and Standing Order 194.

1.2 Inquiry terms of reference

On 18 August 2022 the Legislative Assembly agreed to a motion that the Transport and Resources Committee inquire and report on current practices and activities of the coal mining industry to cultivate and improve safety culture. The terms of reference were that the committee inquire into and report to the Legislative Assembly on:

1. The current practices and activities of the coal mining industry (including coal mine operators and their senior management and associated corporate entities; contractor/labour hire companies and their management; and the Queensland Resources Council) to cultivate and improve safety culture, within its corporate structures and on-site among workers, with particular reference to actions taken and changes/measures implemented in response to the Board of Inquiry's findings and recommendations relating to:
 - a. the impact of coal production rates on safety risk management;
 - b. industry's use of coal production-related and lag safety indicator-related bonuses and incentives to workers and executives, and their impact on the management of safety risk;
 - c. accurate, fulsome and timely identification, classification and reporting of, and effective responses to, incidents and failures of risk controls;
 - d. the appropriateness and potential safety impacts of the use of labour hire; and labour hire workers' roles in on-site safety, at coal mines; and
 - e. on-site safety, generally; and ensuring appropriate measures to address process safety and personal safety separately.
2. That the Committee consider:
 - a. the Board of Inquiry's reports;
 - b. the views of industry stakeholders, worker representatives, workers and the community; and
 - c. options for achieving the intent of the recommendations made by the Board of Inquiry to the coal mining industry.¹⁵

1.3 Scope of the Inquiry

The scope of the inquiry terms of reference comprises Queensland's coal mining industry as a whole, which includes both surface and underground operations. In comparison, the Queensland Coal Mining Board of Inquiry made some findings specifically related to underground coal mines. This inquiry necessarily engages with the safety culture of both surface and underground coal mine operations.

Additionally, while the industry regulator, Resources Safety and Health Queensland (RSHQ) is not explicitly identified in the terms of reference, the committee received submissions both from RSHQ and in respect of it. The regulator plays a critical role in coal mining industry safety culture, and its function is therefore relevant to this inquiry.

1.4 Inquiry process

On 31 August 2022, the committee invited stakeholders, subscribers and any interested persons and organisations to make written submissions addressing any or all of the terms of reference. Submissions closed on 5 October 2022. The committee received a number of requests for extensions, which were agreed to. The committee also wrote to the Premier seeking a whole-of-government submission. Twenty-three submissions were received in total with these including:

- a submission from RSHQ on behalf of the whole-of government
- submissions from coal mine operators in Queensland including Anglo American, BHP Group Limited and BM Alliance Coal Operations Pty Ltd (BHP/BMA), Peabody Energy Australia,

¹⁵ Queensland Parliament, Record of Proceedings, 18 August 2022, pp 2,142-2,143.

Idemitsu Australia Pty Ltd, Kestrel Coal Resources, Glencore Coal, and one company which made a confidential submission

- submissions from the Queensland Resources Council (QRC) and the Mining and Energy Union Queensland Division (MEU)
- submissions from current and former mine industry workers
- submissions from academia and community.

A list of all submissions received is contained in Appendix A.

The committee received a public briefing from RSHQ on 24 October 2022. The committee then held public hearings on 2 November 2022, 28 November 2022 and 10 January 2023. The first of these public hearings was in Moranbah, the second in Brisbane and the third via teleconference.

The committee received responses to questions on notice taken at the hearings and the committee wrote to various stakeholders seeking additional written information. The submissions, correspondence, tabled papers and transcripts of the briefing and hearings are available on the committee's webpage. A list of all witnesses who appeared at the public briefing and public hearings is contained in Appendices B and C.

2 The Queensland Coal Mining Board of Inquiry

On 22 May 2020 the Honourable Dr Anthony Lynham MP, then Minister for Natural Resources, Mines and Energy, established a board of inquiry to investigate a serious accident on 6 May 2020 at the Anglo American operated Grosvenor mine. This accident involved an ignition of methane that caused five coal mine workers to suffer extensive burns to their upper bodies and airways. The Queensland Coal Mining Board of Inquiry (BOI) was required to determine the nature and cause of the serious accident, and to examine 40 methane exceedances that occurred between 1 July 2019 and 5 May 2020 at Grosvenor and other identified mines. The BOI terms of reference were to:

- inquire into the serious accident of 6 May 2020, and determine its nature and cause and any material contributing factors;
- inquire into 40 HPIs involving methane exceedances occurring in and around the longwall at four mines between 1 July 2019 and 5 May 2020;
- assess and determine whether operational practices and management systems in existence at the mines or at corporate levels above them were adequate to achieve compliance with relevant safety laws and standards; and
- make recommendations for improving safety and health practices and procedures and for mitigating against the risk of similar incidents in the future.¹⁶

The BOI heard from representatives of industry and unions; coal mine workers including those injured in the serious accident, technical experts, and inspectors and other officers of RSHQ.¹⁷ The BOI resulted in findings and recommendations for mine operators, relevant obligation holders and other parties for improving safety and health practices and procedures for mitigating the risk of similar accidents occurring in the future. The BOI also considered the nature of any employment arrangements that may have had an effect on the level of risk to which workers were exposed.

¹⁶ Queensland Coal Mining Board of Inquiry, Terms of reference, <https://www.coalminesinquiry.qld.gov.au/terms-of-reference>

¹⁷ Submission 15, p 4.

Part 1 of the BOI Report was handed down in November 2020, and Part 2 was handed down in May 2021. Part 1 contained 25 recommendations and Part 2 contained 40 recommendations. A table of the recommendations made by the BOI is contained at Appendix D.

RSHQ advises that, of the 65 recommendations:

- Thirty were directed at the coal mining industry (in general or to operators of specific mines, including three recommendations specifically for Anglo American in respect of Grosvenor mine)
- Thirty were made to RSHQ
- Three were made to the Coal Mining Safety and Health Advisory Committee (CMSHAC)
- Two were made to the MEU in respect of industry safety and health representatives and encouraging site safety health representative nominations.¹⁸

2.1 BOI recommendations within Inquiry terms of reference

Of the 30 recommendations directed at the coal mining industry, 12 recommendations concerned the technical aspects of managing particular underground hazards or risks such as methane or spontaneous combustion. However the terms of reference for the present inquiry are related to the Queensland coal mining industry as a whole, which also includes surface operations. Other recommendations are directed at organisational factors for coal mining operations, which touch on corporate or business arrangements and behaviours. Accordingly, these may be seen to potentially affect industry culture towards safety.¹⁹ RSHQ describe these recommendations as strategic with an industry-wide, long run focus, with themes that correlate to this inquiry's terms of reference, namely:

- the competing priorities of coal production rates and worker safety
- the impact of production and safety bonuses and incentives on worker safety
- appropriate and effective incident reporting
- the safety implications of the use of labour hire
- general site safety; and the distinction between process safety and personal safety.²⁰

The BOI made two recommendations concerning industry safety and health representatives (ISHRs) – that the current model of appointment of ISHRs be retained (Recommendation 31 Part 2 BOI Report) and that ISHRs take a more proactive role in cultivating mutually beneficial relationships with site safety and health representatives. The committee did not receive any on-point submissions regarding these recommendations, but notes the importance of effective worker representation in coal mining safety systems.²¹

¹⁸ Submission 15, p 5.

¹⁹ Submission 15, p 5.

²⁰ Submission 15, p 5.

²¹ See for example: N Gunningham, Occupational Health and Safety, Worker Participation and the Mining Industry in a Changing World of Work, *Economic and Industrial Democracy*, 29(3) 2008, pp 336–361, <https://doi.org/10.1177/0143831X08092460>; D Walters, R Johnstone, M Quinlan, E Wadsworth, Safeguarding Workers: A Study of Health and Safety Representatives in the Queensland Coalmining Industry, 1990-2013, *Journal of Industrial Relations*, Volume 71, Number 3, Summer 2016, pp. 418–441, <https://www.erudit.org/en/journals/ri/2016-v71-n3-ri02686/1037659ar/>; D Walters, E Wadsworth, R Johnstone, K Lippel, M Quinlan, S Bhattachary, and P James, The role and effects of representing miners in arrangements for safety and health in coal mining: a global study Volume 2: Case studies in five countries,

Some of the submissions responding to the terms of reference that were received by the committee raised the capacity of the regulator, particularly in respect of its role in safety risk management and incident identification, investigation and reporting. Accordingly, where relevant, the committee also reviewed the progress made by RSHQ towards the recommendations made to it by the BOI.

2.2 Industry progress implementing the BOI recommendations

Following the release of each Part of the BOI Report, the Minister confirmed an expectation that industry devise an action plan to implement the recommendations.²² The Minister also called upon industry to ‘fully investigate the extent and nature of ... bonus schemes and whether they place appropriate focus on managing safety risks to workers.’

On 28 July 2022, the Chief Inspector of coal mines for RSHQ, Mr Peter Newman, wrote to all senior site executives (SSEs) of Queensland underground coal mines raising concerns about a lack of visible planning or action, at site level, for implementing the BOI recommendations. The chief inspector requested updates by the end of October 2022.²³ At the public hearing on 24 October 2022, Mr Newman advised that he had not received a single response from underground coal mine operators regarding their implantation plans,²⁴ however this situation had been rectified by 21 November 2022, when RSHQ advised that all underground SSEs had submitted their implementation plans.

In January 2023, RSHQ provided the committee with an update on underground coal mine operators’ progress of the BOI recommendations. RSHQ advised:

All underground coal mines responded to chief inspector Mr Newman’s request for an update on their progress against the board of inquiry’s recommendations in 2022. ... The responses indicate whether the mines accept the recommendations, rather than full implementation. This is considered reasonable as, for some recommendations, implementation will require mines to provide engineering solutions and changes to their existing operational methodology, which requires time to plan and execute.

For 26 of the 30 recommendations, all underground coal mines to whom the relevant recommendation was applicable indicated acceptance of the recommendation.²⁵

A table showing a summary of underground coal mine operators’ progress to which RSHQ refers is included in Appendix E of this report.

The four BOI recommendations which RSHQ advise that underground coal mine operators have not wholesale accepted relate to:

- Rec 11, part I report – Queensland Mines and Rescue Service (QMRS) provide self-escape, generic induction and site induction training - 24% accepted
- Rec 9, part II report - carbon monoxide (CO) from goaf holes be included in total CO make - 67% accepted
- Rec 39, part II report - SSHR inspections be scheduled by the mine - 70% accepted
- Rec 40, part II report - site safety and health representatives be a full-time role - 46% accepted.²⁶

Institution of Occupational Safety and Health, 2018, <https://iosh.com/media/3639/representing-miners-in-arrangements-for-safety-full-volume-2.pdf>

²² Queensland Parliament, Record of Proceedings, 15 June 2021, p 1783.

²³ Submission 15, p 6.

²⁴ Public briefing transcript, Brisbane, 24 October 2022, p 4.

²⁵ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 6.

²⁶ Resources Safety and Health Queensland, correspondence, 13 January 2023, pp 6-7.

RSHQ advises that it will 'continue to review compliance against those recommendations accepted by industry and review the reasons, with the respective mines, those that were not accepted.'²⁷ The committee notes the various submissions made to it by underground coal mine operators, as well as some surface operations. All submissions state that they have progressed the majority of the BOI recommendations.

The Queensland Resources Council (QRC) also updated the committee about its role in assisting industry to progress the BOI recommendations. QRC advised that it had established a lead indicators working group and a methane exceedances and classification working group. A workshop was held by the first working group on 30 November 2021, and the second working group has formed an industry position with respect to methane exceedances.²⁸ There has also been some research commissioned by industry in respect of the capacity of goaf drainage systems. QRC submits that '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.'²⁹

At a public hearing, Mr Matt Cooper, executive head of underground operations for Anglo American advised the committee:

We have seen a fundamental shift in the way underground coalmining is conducted post the inquiry. Focus areas around leadership, culture, technology, removing people from harm's way—all those have come a long way in the last 18 months. It is regrettable that maybe it took this event to motivate some of those improvements, but the industry has developed significantly over the last 18 months. It feels to me like the whole industry has shared. More can always be done, but my experience is that people are very keen to learn and adopt best practice.³⁰

Some worker representative and community submitters express frustration with the perceived lack of action on recommendations coming out of various governmental inquiries into coalmining safety, including the BOI.³¹ Mr Scott Leggett, a current coal mine worker and qualified open-cut examiner (OCE), submitted:

I am yet to see any positive changes to practices or activities of the coal mining industry to improve the safety culture within its corporate structures other than lip service or feel-good motherhood statements like Safety First and Zero Harm.³²

Mr Andrew Iwers, a current coal mine worker and site safety and health representative (SSHR) told the committee at a public hearing:

What has been recommended from the board of inquiry—there are certain aspects of risk management that certainly were applicable. I personally have not seen a great deal of change with any recommendation. Obviously the majority of them would be directed towards underground operations, so in the open-cut sense—very little as far as those things that are underground specific - but with regard to risk management, supervision and that type of thing, I do not see a lot of that changing. I have not seen a great deal of change.³³

²⁷ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 7.

²⁸ Submission 11, p 4.

²⁹ Submission 11, p 3.

³⁰ Public hearing transcript, Brisbane, 28 November 2022, p 24.

³¹ Public hearing transcript, Moranbah, 2 November 2022, p 6 and Submission 13, p 1.

³² Submission 13, p 1.

³³ Public hearing transcript, Brisbane, 10 January 2023, p 4.

Committee comment

Given the regulator's explanation that implementation of the BOI recommendations will reasonably take industry some time to achieve, the committee is generally satisfied with the progress being achieved by industry. Without relevant technical coal mine health and safety expertise, we the committee are not in a position to determine the veracity of industry objections to QMRS training and inclusion of carbon monoxide from goaf holes in total emission calculations. In Section 3 of this report, we engage with the BOI recommendation regarding the full time nature of the SSHR role and the inclusion of SSHR inspections in site work schedules, which some coal mine operators express disagreement with.

We remain very concerned that coal mine worker and community submitters do not believe there has been significant progress towards making mine sites safer since the BOI. The frustration of these submitters is palpable. Coal mine operator submissions habitually emphasise their company's commitment to safety above all else, while worker representatives and community submitters identify ongoing health and safety deficits. We recognise this disjunct between company and worker perspectives on mine safety has perpetuated throughout many inquiries into the coal mining industry in Queensland and elsewhere.

The committee notes that the BOI terms of reference were primarily related to methane exceedances in underground coal mines. Consequently RSHQ has only sought responses from underground coal mine operators regarding their implementation of the BOI recommendations. However, we also note that two of the deaths which have occurred on mine sites in Queensland since 2020 have occurred at Curragh Mine, which is an open-cut operation.³⁴ We also note significant and ongoing media and regulator reports of worker injuries due to machinery rollovers at surface operations.³⁵ We believe it is appropriate for RSHQ to seek immediate responses from surface coal mine operators regarding their implementation of BOI recommendations relevant to surface operations. We recognise this may have resourcing impacts on the regulator given that while there are 14 underground coal mines in Queensland, there are 63 surface operations.

Recommendation 1

Surface coal mine operators in Queensland report to RSHQ regarding their implementation of all recommendations in the BOI reports which are relevant to surface operations by 30 June 2023, to allow RSHQ to review compliance with BOI recommendations by all Queensland coal mine operators;

³⁴ Queensland Government, Fatal accident details for Queensland coal mines from 1882 to the present, https://www.resources.qld.gov.au/__data/assets/excel_doc/0014/240260/fatalities-queensland-mining-industry-1877-present.xls

³⁵ Resources Safety and Health Queensland, Coal Inspectorate, Bulletin No.208 V 1, 16 December 2022, Bulldozer rollover events, <https://www.rshq.qld.gov.au/safety-notice/mines/bulldozer-rollover-events> and see various media reports, for example: Daily Mercury, 'Operator flown to Mackay after serious Saraji mine incident', Duncan Evans, Janessa Ekert and Heidi Petith, 24 January 2023; Daily Mercury, 'Buried': Worker trapped in dozer for 8 hours at mine site', Duncan Evans and Janessa Ekert, 28 January 2023; Daily Mercury, 'Dozer rolls at Anglo Moranbah North mine in Bowen Basin', Heidi Petith, 30 January 2023; Daily Mercury, 'Vehicle-related incident at Poitrel mine at Coppabella', Heidi Petith, 1 February 2023.

3 Queensland coal mining safety framework

3.1 Legislative and regulatory framework

3.1.1 Coal Mining Safety and Health Act 1999

Safety and health in Queensland coal mines is regulated under the *Coal Mining Safety and Health Act 1999* (the CSMH Act). This legislation was the outcome of an extensive tripartite process between government, industry and unions following the Moura No. 2 coal mining disaster in 1994. This framework introduced a risk-based safety and health management system (SHMS) for mining operations to ensure the safety and health of mine workers and persons who may be affected by mining operations. Risk based legislation allows the regulator to target its resources at those sites and activities which present the highest risks to safety and health, and pull back resources from lower risk activities.³⁶ Evidence suggests that the introduction of risk-based legislation has resulted in reduction in coal mining injuries and fatalities.³⁷ There has been an absence of multiple fatality disasters and an overall reduction in the rate of fatalities per year since the introduction of the CSMH Act. The Chief Inspectorate of coal mines, Mr Peter Newman advised the committee:

While the industry came very close to having a multiple-fatality event at Grosvenor on 6 May, all of the multiple-fatality disasters that have occurred in the mining industry occurred under prescriptive legislation. There has not been one to date. There have continued to be multiple single-fatality events, but there has not been a multiple-fatality event since enabling legislation. I was in industry when the legislation was enacted. It would be fair to say that the industry had a passion for risk-based legislation and risk management.³⁸

Under the CSMH Act, coal mine workers can elect two site safety and health representatives (SSHR) per mine and the MEU has the right to appoint up to three ISHRs.³⁹ The role of SSHRs and ISHRs is addressed in Section 3.2 of this report.

Various amendments to the CSMH Act have been proposed in a Consultation Regulatory Impact Statement (CRIS) released by RSHQ, in response to the BOI Report and a 2019 independent review of all fatal accidents in Queensland mines and quarries during 2000-2019 by Dr Sean Brady (the Brady Review).⁴⁰ BOI Recommendations to be addressed by legislative enhancements proposed in the CRIS include:

- Enhanced requirements for critical controls – Recommendation 19 Part 1 BOI Report and Recommendation 6 Part 2 BOI Report
- Improved competency requirements for safety critical roles – Recommendations 13-15 Part 1 BOI Report
- Improved training requirements for coal mine workers regarding applicable health and safety legislation – Recommendation 12 Part 1 BOI Report

³⁶ J Black and R Baldwin, 'When risk-based regulation aims low: approaches and challenges', *Regulation and Governance*, 6 (1), 2012, pp 2-22.

³⁷ Resources Safety and Health Queensland, *Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement*, Consultation Regulatory Impact Statement, 2022, p 18; D Walters, M Quinlan, R Johnstone and E Wadsworth, 'Representing miners in arrangements for health and safety in coalmines: A current study of practice', *Economical and Industrial Democracy* 2019, Vol. 40(4) pp 976-996.

³⁸ Public briefing transcript, Brisbane, 24 October 2022, p 5.

³⁹ Coal Mining Safety and Health Act 1999, s 93(1) and s 109(1).

⁴⁰ Resources Safety and Health Queensland, *Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement*, Consultation Regulatory Impact Statement, 2022,

- Improved coverage of industrial manslaughter provisions – Recommendation 25 Part 1 BOI Report
- Strengthened protections for workers from reprisal for raising safety issues – Recommendation 29 Part 2 BOI Report
- Enhanced safety obligations of labour hire agencies – Recommendations 23-25 Part 2 BOI Report
- Implementing safety committees to improve mechanisms for workers to report safety issues – Recommendation 27 Part 2 BOI Report.⁴¹

3.1.2 Coal Mining Safety and Health Regulation 2017

The Coal Mining Safety and Health Regulation 2017 provides the framework to support the safety and health obligations under the CSMH Act. The Regulation also provides for an annual health and safety fee to be payable by coal mine operators to fund the safety and health services provided to the coal mining industry through RSHQ.

3.1.3 Recognised standards

Section 72(1) of the CSMH Act specifies that the Minister may make recognised standards. Standards outline how to achieve an acceptable level of risk for people working in coal mines. Standards permit coal mine operators some latitude to choose their risk management strategy, while ensuring that strategy is equivalent to the method set out in the recognised standard.

There are presently 23 recognised standards applying to coal mines in Queensland, with five more under development by a tripartite working group. Additionally, there are currently 12 guidance notes applying to Queensland coal mines.⁴² Guidance notes are issued to help operators meet their safety and health obligations.

3.1.4 Resources Safety and Health Queensland

RSHQ is an independent statutory body and the regulator of worker safety and health in Queensland's resources industry. RSHQ is established by the *Resources Safety and Health Act 2020* and is headed by the chief executive officer, who reports directly to the Minister. Its purpose is to regulate, educate and assist industry in meeting its obligation to protect the safety and health of workers and affected communities.⁴³ RSHQ is responsible for administering safety and health legislation applying to Queensland's resources industries. The primary work of RSHQ includes: mine inspections, audits and investigations; penalties and prosecutions; and advice and support.

The Coal Inspectorate is one of eight divisions within RSHQ, and administers the CSMH Act. It is led by the Chief Inspector of Coal Mines and carries out inspections, audits and investigations of safety and health management systems in underground and open cut coal mines and coal exploration sites.⁴⁴ It undertakes investigations into serious accidents, high potential incidents (HPIs) and complaints from

⁴¹ Resources Safety and Health Queensland, *Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement*, Consultation Regulatory Impact Statement, 2022, pp 23-25.

⁴² Queensland Government, Business Queensland, *Recognised standards, guidelines and guidance notes*, <https://www.business.qld.gov.au/industries/mining-energy-water/resources/safety-health/mining/legislation-standards/recognised-standards>

⁴³ Resources Safety and Health Queensland, *Annual Report 2021-22*, p 7.

⁴⁴ Resources Safety and Health Queensland, Coal Inspectorate, <https://www.rshq.qld.gov.au/about-us/what-we-do/coal>

coal mine workers about safety and health matters. As of 30 June 2022, it had 27 inspectors and three investigation officers working out of offices in Brisbane, Mackay, and Rockhampton.⁴⁵

RSHQ received 30 of the 65 recommendations made by the BOI. Fifteen recommended that RSHQ take steps to amend legislation. One recommendation explicitly retained existing legislative arrangements, relating to industry safety and health representatives. Seven recommendations concerned inspectorate practice or procedure, and six recommended consideration of changes to, or introduction of new, recognised standards.⁴⁶

RSHQ implemented five of these recommendations in 2021-22 and reports that it has made substantial progress on the remaining 25.⁴⁷ Proposals to progress the 15 recommendations concerning legislative amendment are outlined in a regulatory impact statement which was released for public consultation in September 2022.⁴⁸ It is envisaged that a resulting bill will be introduced in the parliament in late 2023 and will be referred to this committee for consideration.⁴⁹

The seven recommendations concerning inspectorate practice or procedure are predominantly technical in nature and are currently being progressed within the inspectorate. Work to implement the six recommendations about new or amended recognised standards is being undertaken by the recognised standard tripartite working groups in accordance with an established consultative development procedure.⁵⁰

3.1.5 Coal Mining Safety and Health Advisory Committee

The Coal Mining Safety and Health Advisory Committee (CMSHAC) is established under Part 6 of the CSMH Act to provide advice and make recommendations to the Minister on coal mining safety and health. The CMSHAC is a tripartite body composed of government, industry and coal mine worker representatives.

Its primary function is to review the effectiveness of risk controls for coal mining operations. In 2020-2021 its work included identifying, prioritising and providing advice about critical safety risks; providing information about the performance of RSHQ; and recognising, establishing and publishing competencies.⁵¹ CMSHAC has also responded to specific BOI recommendations to review and revise some competencies for site senior executives, and work with registered training organisations to include critical control management in standard risk management training packages.⁵²

The Independent chair of the CMSHAC is the Commissioner for Resources, Safety and Health, Ms Kate du Preez. The Commissioner advises the Minister on matters relating to safety and health in the resources sector, and monitors, reviews and reports to the Minister on the performance of RSHQ.

3.2 Industry framework

3.2.1 Queensland Resources Council

The QRC is an independent body that is Queensland's peak industry association representing the commercial developers of the state's minerals and energy resources. Its members include explorers, miners, mineral processors, contractors, oil and gas producers and electricity generators. QRC's role

⁴⁵ Resources Safety and Health Queensland, Annual Report 2021-22, p 14.

⁴⁶ Submission 15, p 6.

⁴⁷ Resources Safety and Health Queensland, Annual Report 2021-22, p 7.

⁴⁸ Resources Safety and Health Queensland, *Public consultation*, <https://www.rshq.qld.gov.au/about-us/resources/public-consultation>

⁴⁹ Submission 15, p 7.

⁵⁰ Submission 15, p 7.

⁵¹ Coal Mining Safety and Health Advisory Committee, Annual Report 2020-21, p 8.

⁵² Coal Mining Safety and Health Advisory Committee, Annual Report 2020-21, p 15.

is to support the long-term sustainability of the minerals and energy sector in Queensland by promoting the industry; engaging government; and encouraging excellence.⁵³

3.2.2 Coal mine operators

Coal mine operators in Queensland employ approximately 36,000 workers. There are over 300 coal mine operators in Queensland, with most of these engaged in coal exploration activities. There are 63 surface coal operators and 14 underground coal mine operators in Queensland.⁵⁴

A locality map of Queensland coal resources is shown on the map overleaf.

⁵³ Queensland Resources Council, About, <https://www.qrc.org.au/about/>

⁵⁴ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 11.

3.2.2.1 *Coal mine site and health management systems*

Division 3 of the CSMH Act prescribes the use of SHMS in Queensland. The Act states that ‘the safety and health management system, for a coal mine, is a single system that incorporates risk management elements and practices that ensure the safety and health of persons who may be affected by coal mining operations.’⁵⁶ As well, that the SHMS ‘must provide a single, comprehensive and integrated system for the management of all aspects of risks to safety and health in relation to the operation of the coal mine.’⁵⁷

3.2.2.2 *Site Safety and Health Representatives*

The BOI highlighted the important safety role that Site Safety and Health Representatives (SSHRs) perform at mines. The BOI found that the SSHR role is currently concerned with day-to-day site conditions and practices, rather than higher-level safety issues such as catastrophic risk mitigation. Additionally, the BOI found that the role is being utilised as intended: to identify issues and address safety concerns.⁵⁸ The SSHR functions and powers are set out in Part 7 of the CSMH Act. The functions of an SSHR include:

- (a) to inspect the coal mine to assess whether the level of risk to coal mine workers is at an acceptable level;
- (b) to review procedures in place at the coal mine to control the risk to coal mine workers so that it is at an acceptable level;
- (c) to detect unsafe practices and conditions at the coal mine and to take action to ensure the risk to coal mine workers is at an acceptable level;
- (d) to investigate complaints from coal mine workers at the mine regarding safety or health.⁵⁹

SSHRs must, upon a mine site inspection, notify coal mine inspectors of dangers or potential dangers on a mine site. If the SSHR is not satisfied that the SSE is taking the action necessary to make the SHMS adequate and effective, the SSHR must advise a coal mine inspector. If the SSHR reasonably believes there is immediate danger to the safety and health of coal mine workers from operations, the SSHR may personally stop the operations or require the supervisor in charge to stop the operation. SSHRs are protected under the CSMH Act from being prevented or penalised for performing their duties.⁶⁰

The BOI confirmed the importance of SSHRs and their function in overseeing health and safety issues at the site level. The evidence given by SSHRs at the BOI hearings confirmed that there was a generally productive and cooperative relationship between workers, SSHRs and mine management across the industry. In its submission BHP/ BMA spoke to the active involvement of SSHRs in various consultation activities. For example, SSHRs are typically included in site-based risk assessments, are informed of various matters in relation to health and safety, and play an active and constructive role in ensuring a safe workplace.⁶¹

Recommendation 40 of Part 2 of the BOI report called for the SSHR to be a full-time role, yet only 46% of underground coal mine operators support this recommendation. Most industry submitters instead prioritise the involvement of the employee who performs the SSHR function in daily operations in

⁵⁶ *Coal Mining Safety and Health Act 1999*, s 62 (1)

⁵⁷ *Coal Mining Safety and Health Act 1999*, s 62 (3)

⁵⁸ Queensland Coal Mining Board of Inquiry, Report Part 2, May 2021, findings 107-109.

⁵⁹ *Coal Mining Safety and Health Act 1999*, s 99.

⁶⁰ *Coal Mining Safety and Health Act 1999*, s 105.

⁶¹ Submission 17, p 7 and, see Queensland Coal Mining Board of Inquiry, Report Part 2, May 2021, finding 107 and Chapter 13.

order to remain appropriately embedded in production activities. Anglo-American explains that the SSHR undertakes an operational supervisory function.⁶² Peabody submits:

We believe [SSHR] value is enhanced when their role is not fulltime and they are instead embedded into the workforces, conducting usual day-to-day production or maintenance work, thereby giving them critical and direct insight into the safety and health issues concerning and affecting workers. This practical understanding and insight would be lost if the role was converted to full-time, turning the SSHR into a de factor safety department advisor with little day-to-day experience of practical safety and health risks.⁶³

Recommendation 39 of Part 2 of the BOI report suggested coal mines use their work order system to schedule and record the completion of an SSHR inspection to assist with incorporating the inspection activity into the mine's weekly plan, and to demonstrate management support for the SSHR function. Anglo American has committed to scheduling SSHR inspections in its work order system. 'This is currently in different stages of implementation across our underground mines with the expectation that this will be fully in place by the end of 2022'.⁶⁴

BHP/ BMA submits:

Each of our sites have processes in place to facilitate SSHR inspections (which occur monthly unless the SSHR is not available). SSHRs work with their respective sites to arrange inspections. Incorporation of the schedule in the work order system could inadvertently impact SSHR rights in that process. Findings and reports from inspections are recorded and implemented in site systems. We are confident that SSHRs are fully supported in their functions, and do not consider that changes to the above process are necessary.⁶⁵

3.2.3 Worker representatives

Coal mine workers are represented through a variety of unions and professional associations. The Mining and Energy Union Queensland District (MEU) is the largest union in the coal mining sector and is the principal union with coverage of workers performing all roles within the sector.⁶⁶ The MEU represents workers, mainly in coal mining and also in metalliferous mining, coal ports, power stations, oil refineries and other parts of the oil and gas production chain.⁶⁷ They are recognised in the CSMH Act, with certain roles and responsibilities.⁶⁸

3.2.3.1 Industry Safety and Health Representatives

The BOI found that Industry Safety and Health Representatives (ISHRs) have an important role in maintaining safety and health at coal mines. ISHRs are appointed by MEU under section 109 of the CSMH Act, which provides that the union may, after a ballot of its members, appoint up to three ISHRs. The ISHR supports coal miner worker rights in the workplace including the right to be consulted, to participate in joint OH&S committees, receive information, and inspect workplaces, accidents and incidents. Evidence indicates that this type of participatory arrangement are associated with improved

⁶² Anglo American, correspondence, 12 December 2022, p 8.

⁶³ Peabody Energy Australia Pty Ltd, correspondence, 8 December 2022, p 6.

⁶⁴ Anglo American, correspondence, 12 December 2022, p 7.

⁶⁵ BHP Group Limited and BM Alliance Coal Operations Pty Ltd, correspondence, 15 December 2022, p 5.

⁶⁶ Submission 14, p 1.

⁶⁷ Mining and Energy Union, Queensland District, <https://me.cfmeu.org.au/queensland-district>

⁶⁸ *Coal Mining Safety and Health Act 1999*, ss 109, 114, 292.

health and safety practices and lower rates of injuries.⁶⁹ The BOI found that the ISHR role is additional to, and ideally complementary with, that of the SSHR.

The ISHR functions and powers are provided in Part 8 of the CSMH Act. The functions of an ISHR are:

- (a) to inspect coal mines to assess whether the level of risk to the safety and health of coal mine workers is at an acceptable level;
- (b) to review procedures in place at coal mines to control the risk to safety and health of coal mine workers so that it is at an acceptable level;
- (c) to detect unsafe practices and conditions at coal mines and to take action to ensure the risk to the safety and health of coal mine workers is at an acceptable level;
- (d) to participate in investigations into serious accidents and high potential incidents and other matters related to safety or health at coal mines;
- (e) to investigate complaints from coal mine workers regarding safety or health at coal mines;
- (f) to help in relation to initiatives to improve safety or health at coal mines.⁷⁰

ISHR powers include inquiries, inspections, examination of documents, requiring SSEs to provide reasonable help in the exercise of ISHR powers, and issuing directives.⁷¹

The BOI found that the existing model for appointment of ISHRs is the best available, in that it provides the opportunity for organised labour to participate democratically in the appointment process. It also guarantees that industry representatives are independent of both government and management at coal mines. Additionally, the BOI found that the ISHR function is best carried out where a cooperative arrangement exists between it and the SSHR. A 2016 study of Queensland coal mine safety representatives found that while SSHRs are focussed generally on preventing the recurrence of an incident, ISHRs are more concerned with the wider implications of the incident and investigation process.⁷²

3.3 Tripartite working arrangements

The systematic management of health and safety operates through a 'prevention triangle' whose vertices comprise 'competent employer engagement, with responsible for evaluating and controlling risks; worker representation contributing practical knowhow and monitoring management functions, and state regulation and inspection.'⁷³

The CSMHAC reflects this type of 'prevention triangle' where coal mine operators, worker representatives and the regulator work together to review risk to health and safety in Queensland coal mining. Submissions to the inquiry suggest that such tripartite arrangement might be working well in some areas, such as the industry's response to the COVID pandemic. Mr Ian McFarlane, Chief Executive of QRC submitted:

⁶⁹ D Walters, M Quinlan, R Johnstone and E Wadsworth, 'Representing miners in arrangements for health and safety in coalmines: A current study of practice', *Economical and Industrial Democracy* 2019, Vol. 40(4) pp 976-996.

⁷⁰ *Coal Mining Safety and Health Act 1999*, S 118.

⁷¹ *Coal Mining Safety and Health Act 1999*, S 119.

⁷² D Walters, M Quinlan, R Johnstone and E Wadsworth, 'Representing miners in arrangements for health and safety in coalmines: A current study of practice', *Economical and Industrial Democracy* 2019, Vol. 40(4) pp 976-996.

⁷³ D Walters, M Quinlan, R Johnstone and E Wadsworth, 'Representing miners in arrangements for health and safety in coalmines: A current study of practice', *Economical and Industrial Democracy* 2019, Vol. 40(4) pp 976-996.

I think the response to COVID was based on the tripartite arrangements we are used to in terms of safety, so we were able to discuss things. There is a good relationship between the CFMEU, Stephen Smyth and I, and obviously the government and RSHQ, so it is an ongoing discussion. As I said, if we can have more of a focus around discussions, the sharing of information and sharing of incidents rather than overregulation which will not fit.⁷⁴

The need for improved sharing of information between employers, workers and the regulator was a common issue in submissions, and one which the committee saw first-hand when the QRC submitted about an anonymous hotline run by the regulator for workers to be able to report complaints about safety. None of the coal mine operator witnesses who gave evidence at a public hearing had heard of this hotline and it was eventually clarified by the regulator that no such hotline existed, and that the QRC had mistaken the inspectorate's phone number for a hotline:

the 'hotline' reference also has the potential to confuse the nature and purpose of the reporting mechanisms RSHQ administers and RSHQ wishes to clarify this. The Queensland Mines Inspectorate has always maintained a confidential complaints framework, where any person who has information about a contravention of mining safety and health legislation or a dangerous situation on a mine site, may report that matter confidentially to an inspector.⁷⁵

In its written submission, Idemitsu Australia indicated its concern at the lack of recent genuine tripartite consideration of potential reforms to improve safety:

Idemitsu Australia is fundamentally of the view that this is the point at which it is most important for companies, regulators, unions and the government to come together to establish systems of safety which will genuinely enhance both operational day-to-day safety - including how best to embed the concept and functioning of High Reliability Organisations among Queensland coal mine operators. Unfortunately, there has been limited effective engagement between unions, government and industry over the last twelve months, with a range of legislative measures being proposed or implemented which actively go against the recommendations and implications of the Brady Review - for example, by increasing barriers to the engagement of well-trained and experienced persons to take on statutory roles.⁷⁶

Idemitsu also raised concerns about the lack of lesson sharing that it perceives is impacting the coal mining industry.

Key to implementing a safety culture and enabling HRO behaviours is the requirement for timely truth-telling. At the organisational level it is critical to establish a culture of trust and psychological safety so that difficult conversations about failure are able to be shared, so that they can be learned from.

In respect of the Queensland Mining Industry Health and Safety Conference, held on the Gold Coast in August 2022, the lack of sharing from Queensland mines was, in our view, indicative a culture of fear that has grown out of the ongoing trend of recent amendments to the coal mining safety acts which has been to create new and increased penalties. In contrast, case studies from NSW mines were shared. Our previous experience was that the overwhelming majority of safety case studies were from Queensland coal mine operators. In our view the sentiment widely shared was that sharing case studies was a way to share insights and to promote better practice. Unfortunately, a trend towards increasingly harsh penalties and sanctions focused against site managers at all levels, mean that 'truth-telling' is effectively discouraged and will inevitably and unfortunately be replaced by self-protective behaviours.⁷⁷

⁷⁴ Public hearing transcript, Brisbane, 28 November 2022, p 7.

⁷⁵ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 2.

⁷⁶ Submission 16, p 4, 14.

⁷⁷ Idemitsu Australia Pty Ltd, correspondence, 8 December 2022, p 5.

Anglo American submitted that in order to improve tripartite collaboration, consideration may be given to reviewing the role and functionality of the CSMHAC.⁷⁸

Committee comment

The committee notes the evidence that the Queensland coal mining industry has suffered fewer fatalities since the introduction of risk-based legislation, through which greater safety risks are subject to higher levels of regulatory control while lower risk activities are remitted to the coal mine operator to monitor and mitigate. The committee notes the proposed legislative amendments emanating from the BOI Report contained in the CRIS, and the increasing number of recognised standards being proposed and implemented. A common theme in industry submissions is that constant change to the legislative and regulatory framework creates an increasing amount of compliance obligations, and widens the requisite scope of the regulator's role to monitor such compliance. We note the potential for compliance activities to compete with focussed, consistent implementation of site safety and health management systems, and a potential disparity between the regulators' resourcing and its remit. However, industry must allocate sufficient resourcing to all safety activities, whether compliance or SHMS-related. It is not an either/ or proposition.

We note dissenting company submissions regarding whether the SSHR should be a full time role as recommended by the BOI, however the findings of the BOI on this issue are compelling, and we strongly encourage industry to reconsider the advantages of making the SSHR a full-time role at mine sites.

We also note the evidence regarding current tripartite working arrangements for the coal mining sector. It appears that slight misapprehensions can have significant ramifications, which will not resolve if, as some submitters demonstrate, there has been a recent decline in the level and nature of the consultations taking place between employers, workers and the regulator.

Recommendation 2

The CSMHAC ensure that a genuinely tripartite consensus is arrived at regarding the full-time nature of the SSHR role at Queensland mine sites; industry should subsequently give full effect to the settled tripartite position;

Recommendation 3

The Minister consider what forums and mechanisms can be used to improve the quality of tripartite communication around Queensland coal mining health and safety;

4 The impact of coal production rates on safety risk management

The BOI was primarily focussed on investigating certain incidents of methane exceedance, including at Grosvenor Mine, and found that 'the systemic cause was that the gas emissions being generated by the mine's rate of production were in excess of the capacity of the mine's gas drainage system.'⁷⁹ The BOI identified instances where necessary risk assessments were not carried out before the

⁷⁸ Anglo American, 12 December 2022 correspondence, p 2.

⁷⁹ Queensland Coal Mining Board of Inquiry, Report Part II, May 2021, findings 4, 6, 14, 16, 18, 20, 45, 47 and 49.

commencement of mining,⁸⁰ and where production targets were not adjusted despite the emergence of high gas emissions.⁸¹ In respect of underground mines, the report stated that ‘producing coal at a rate that consistently exceeds the capacity of the critical control of gas drainage subjects coal mine workers to an unacceptable level of risk.’⁸²

The present inquiry is concerned with coal production rates on safety risk management across all Queensland coal mines. The committee reviewed submissions from RSHQ, QRC and coal mine operators, individual coal mine workers, workers’ associations and community representatives.

4.1 Industry response

The common theme in coal mine operator submissions to the inquiry is that production and safety are inextricably connected, with safety or ‘safe production’ characterised as each operator’s primary corporate value. BHP/ BMA submit that:

Production related metrics are considered subsidiary to safety metrics – we firmly believe that: (a) safety is critical to our success, and no production is warranted unless it can be completed safely; and (b) a safe organisation is a productive organisation.⁸³

Glencore submits that:

Health and safety duties and responsibilities are intimately intertwined in all aspects of coal mining, including in the production of coal. Attempting to disengage health and safety from production diminishes health and safety outcomes at the operations by undermining the fundamental principles around safety that the industry has been working hard to entrench in its workforces. Industry experience suggests that the separation of health and safety duties from production responsibilities can lead to increased levels of risk as well as reduced operational efficiencies.⁸⁴

No coal mine operator submitted that production rates negatively impact safety, but all company submitters acknowledged that the industry has inherent health and safety risks to manage, and directed their response to this term of reference towards their efforts to ensure safe production.

Within Anglo American, we understand that planned work is an estimated 70% safer than unplanned work. Our Anglo American Operating Model (AAOM) focuses on planning, ensuring the work is properly scoped, procedures and resources defined, risk assessments included, controls clearly highlighted and scheduled properly. No work can occur unless all these pieces come together. Our production plans are based on planned and safe work practices under AAOM.⁸⁵

4.1.1 Transforming to High Reliability Organisations

Many submissions acknowledged the importance of High Reliability Organisation (HRO) principles to safer coal production. The applicability of HRO theory to the Queensland mining industry emerged as a finding from the 2019 Brady Review. The BOI reinforced HRO theory as a pathway towards a safer Queensland coal industry.

HRO theory is based on over 20 years of research and practical implementation across organisations that operate in highly complex and hazardous fields, yet consistently maintain

⁸⁰ Queensland Coal Mining Board of Inquiry, Report Part II, May 2021, p 4.

⁸¹ Queensland Coal Mining Board of Inquiry, Report Part II, May 2021, p 4.

⁸² Queensland Coal Mining Board of Inquiry, Report Part II, May 2021, p 6.

⁸³ Submission 17, p 13.

⁸⁴ Submission 23, p 8.

⁸⁵ Submission 19, p 5.

strong safety and efficiency records... HROs are committed to safety at the highest level of the organisation and throughout.⁸⁶

Coal mine operators emphasised how they are embedding safety in their workplace culture and their efforts towards facilitating HRO behaviours. Mr Shane Hansen, chief executive of Kestrel Coal advised the committee at a public hearing that:

The recognition that the tools that will take us further on this journey of fatality prevention needs to be focused on the strength of the team culture that can be maintained in a workplace where everyone is uneasy, because we know that systems will have weaknesses and we need to be alert to the signs that show the process is deviating from the norm.

...

We are strong advocates for the integration of the principles of a high-reliability organisation, commonly referred to as HRO. We think the mining industry can avoid catastrophes despite the high level of risk and complexity in our industry. That mindset is not one that is easily or quickly achieved, at least not successfully or sustainably in a short time frame. It is this change in mindset and operational parameters to deliver a fundamental shift in the way the industry approaches everything we do—not just safety—that will ultimately create a safer industry for us to work in.⁸⁷

Idemitsu Australia’s written submission states that:

Culture however can be neither legislated nor can it be instructed. It is however the only force within any organisation which is adaptable, responsive, and agile enough to overcome any acceptance of a certain level of risk, if such an acceptance can indeed be made out on the facts.

...

The Brady Review undertakes an important discussion of mines as complex systems of behaviours, where safety is an emergent part of a complex system, rather than as a single part of the organisation that can be isolated or pointed to. According to the Brady Review safety is the product of a system made up of a range of competing goals including production pressures, budget constraints, culture and unions - (which) will all interact to govern the safety on site. In effect, the establishment of an HRO framework within a coal mine, is intended to set a culture which will provide the best circumstances for positive safety outcomes.⁸⁸

4.2 Worker representative response

A recurring theme in worker representative submissions is that while industry may espouse safety first principles, coal mines sometimes depart from established safety procedures in order to maximise production. This is attributed to a workplace culture driven by production, and corporate structures of coal mine operators which impair the ability of mine managers to ultimately control the allocation of that site’s resources. Mr Andrew Iwers, a coal mine worker who is employed as a SSHR, provided multiple examples of ways that coal production is prioritised on mine sites.⁸⁹ These examples included: a deterioration in the general state of haul roads when coal mine workers who would normally operate water trucks or graders are redeployed to operate production machinery; and supervisors knowingly ignoring or contravening standard operating procedures to ensure continuity of production rates. Mr

⁸⁶ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland’s Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 13.

⁸⁷ Public hearing transcript, Brisbane, 28 November 2022, p 29.

⁸⁸ Submission 16, pp 13-14.

⁸⁹ Submission 8, p 1.

Iwers submitted that these instances tend to occur in the lead-up to end of month and towards the end of the year, when production targets have to be met.

The potential for corporate structures to impact the safety risk of individual mines sites was observed in Chapter 6 of the BOI Part One Report. This potential was noted by the Mine Managers Association of Australia (MMAA) in its submission that:

In many instances the SSE has no real control over the resources, those being dictated by corporate headquarters and the UMM, in some instances, has been relegated to that of a compliance manager and not even on the actual, as opposed to unofficial, management structure at the mine. This we perceive as a major concern as that type of structure could lead to a significant incident.⁹⁰

While MMAA also submit that ‘no substantial or hard evidence has ever been produced to verify the claims that the production of coal is priority and that safety takes a lower priority’⁹¹ the committee heard from individual coal mine workers who advised that mine managers exert significant pressure on statutory safety officials to ensure that production is not impeded. Mr Scott Leggett told the committee during a public hearing that:

If you guys go out on to a mine site you will see big signs that say ‘Zero harm’ and ‘Safety first’ — all that type of stuff. That is told to us daily. Is it a reality? No. Production will always come in front of safety. Does it mean that they are going to send you down into a pit that is on fire? No, but it is the culture that is driven. That is my firm belief. I see it; I get to live and breathe it. My job is compliance. My job is to go out and find unsafe stuff and make it safe and inspect areas before coalmine workers go in there. I know the pressure I get, and it is not week to week; it is day to day, hour to hour.⁹²

Mr Andrew Iwers submitted:

The use of KPI’s such as “time to first coal” are used as an indicator of efficiency within the production process, yet this comes at the cost of compliance with risk management process and controls to ensure safety, such as not carrying out safety checks on vehicles prior to starting work each shift, as [coal mine workers] are encouraged to do them once they start production.⁹³

A 2019 survey of 1,010 Queensland coal mine workers (comprising both union and non-union members) undertaken by the MEU found that 80% of those surveyed indicated that their biggest safety concern was companies valuing production over safety. The full survey results are available in Appendix F.

4.3 Community response

Professor Andrew Hopkins, Emeritus Professor of Sociology at Australian National University whose work was cited extensively by the BOI, submitted to this inquiry that at Grosvenor Mine operated by Anglo American, ‘mine management was constantly being held accountable for the production, via monthly performance reviews and by the system of remuneration, but there was no corresponding mechanism holding management accountable for how well it was managing the risk of methane gas explosion.’⁹⁴ He further submits that the safety obligations of statutory office holders are compromised by the constant pressure from that person’s superiors to maximise production.⁹⁵

⁹⁰ Submission 10, p 5.

⁹¹ Submission 10, p 9.

⁹² Public hearing transcript, Moranbah, 2 November 2022, pp 11-12.

⁹³ Submission 8, p 2.

⁹⁴ Submission 2, p 3.

⁹⁵ Submission 2, p 6.

4.4 Regulator response

The Queensland Chief Inspector of coal mines, Mr Peter Newman, advised the committee at a public hearing in October 2022:

My inspectorate have, over this year and the previous year, across a number of operations, had to suspend operations because they believed that there is evidence that those operations had an unacceptable level of risk. The number of those directives and suspensions has increased over the past 18 months compared with the previous 18 months. My view is that anytime a directive is given to suspend operations the safety of that operation has not been put in front of the production requirements of the mine.⁹⁶

RSHQ has stated its support for the industry adopting HRO behaviours.⁹⁷

HROs are open to receiving ‘bad news’ and taking appropriate action to address potential sources of harm. It follows that HRO theory is inconsistent with reprisal for raising safety issues and RSHQ considers that genuine pursuit of HRO behaviours will go some way to instilling workers with confidence to speak up about safety issues.

RSHQ accepts that there remains a great deal of work to be done to improve understanding of HRO theory and how it might be applied in the coal mining industry – and that RSHQ has a lead responsibility in this regard.⁹⁸

The CRIS proposed by RSHQ intends to give statutory guidance to industry around facilitating HRO behaviours.

Committee comment

The committee notes the disjunct between coal mine operators’ stated commitments to safety, and worker submissions about their daily experiences of inadequate site safety risk management. We also note the impossible task of evaluating conflicting anecdotal evidence about how coal mine operators reconcile the competing priorities of production and safety, in the absence of empirical evidence. We note with concern the survey results provided by the MEU regarding worker perceptions of how their employers manage the competing priorities of production and safety. The committee also notes submissions from RSHQ regarding an increase in the number of directives it has issued in the 18 months since the second BOI report was released. However these two accounts alone are not conclusively empirical evidence of an industry which is prioritising production over safety.

We note that workplace culture appears critical to successfully achieving safe, sustainable coal production, and while the efforts that companies describe towards transforming into High Reliability Organisations is admirable, empirical information about Queensland coal mine workplace culture was not presented to the committee. Further research into how coal mines in Queensland are managing the competing demands of production and safety would benefit the industry as a whole.

Recommendation 4

The CSMHAC commission independent research into the impact of coal production rates on safety risk management in Queensland coal mines. Coal mine operators must facilitate sufficient access to, and protections for, members of their workforce who participate in this research;

⁹⁶ Public briefing transcript, Brisbane, 24 October 2022, p 4.

⁹⁷ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 4.

⁹⁸ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 5.

5 Use of coal production-related and lag safety indicator-related bonuses and their impact on management of safety risk

The BOI considered the appropriateness of using lag and leading indicators to measure safety in coal mines. Lag indicators have traditionally been used to measure mine safety performance. The BOI defined lag indicators as including but not limited to fatalities; permanently disabling injuries; minor or lost time injuries (and lost time injury frequency rate (LTIFR)); medical treatment injuries; injury severity rates (number of employment days lost); workers compensation insurance payments; and number of high potential incidents.⁹⁹

Lag indicators measure past performance and reflect past safety outcomes with a focus on the measurement of adverse events sustained as a consequence of inappropriate safety performance.¹⁰⁰ Lag indicators allow coal mine operators to detect performance gaps and determine the effectiveness of the controls in place in a SHMS to manage risks. The inability of lag indicators to effectively prevent incidents and injuries has led to an increasing focus on lead indicators as a more contemporary safety measure.

Lead safety indicators are precedent in nature, and focus on future safety performance in a cycle of continuous improvement. They are sometimes described as inputs, and identify the actions necessary to achieve the goals with measurable outcomes.¹⁰¹ They 'lead' to successfully meeting overall business objectives. The BOI defined lead indicators as including but not limited to:

1. identification of critical controls;
2. verification of the effectiveness of critical controls;
3. appropriate identification and investigation of all high potential incidents;
4. close-out of corrective actions resulting from incident investigations;
5. conduct of audits and close out of identified corrective actions;
6. provision of quality training in risk management; and
7. conduct of emergency exercises and completion of identified system improvements.¹⁰²

Part 1 of the BOI Report made two recommendations regarding lead and lag safety indicators:

23. The industry gives lead safety indicators greater weight than lag safety indicators when measuring safety performance.
24. The industry gives lead safety indicators greater weight than lag safety indicators in the determination of executive bonuses

Part 2 of the BOI Report recommended:

22. The industry reviews its production and safety bonus structures and make any necessary changes to ensure that those structures do not inadvertently discourage the reporting of safety incidents or injuries.

5.1 Industry response

Coal mine operator submissions spoke of the different roles that lag and lead safety indicators play in measuring safety performance.

⁹⁹ Queensland Coal Mining Board of Inquiry, Report Part I, November 2020, p 171.

¹⁰⁰ Queensland Coal Mining Board of Inquiry, Report Part I, November 2020, p 171.

¹⁰¹ Queensland Coal Mining Board of Inquiry, Report Part I, November 2020, p 170.

¹⁰² Queensland Coal Mining Board of Inquiry, Report Part I, November 2020, p 170.

Both are included because lead and lag safety indicators play different roles, and each are essential in ensuring we are driving the right behaviours to keep our people safe at work, including at our mines. Further, production related metrics are considered subsidiary to safety metrics, as we firmly believe that safety is critical to our success, and no production is warranted unless it can be completed safely.¹⁰³

Generally, coal mine operators submitted that they use a mix of lead and lag indicators when measuring safety performance and that this mix is reflected in bonus structures for both coal mine workers and senior executives.¹⁰⁴

Currently, the Peabody executive bonus system gives equal weight to lead and lag safety indicators with half of the safety component based on total recordable injury frequency rate (TRIFR) and half based on performance against the standards in the Safety and Sustainability management system, with additional bonuses for exemplary performance.¹⁰⁵

Some coal mine operators spoke of efforts to review bonus structures with recent incorporation of leading indicators into their bonus schemes.¹⁰⁶ Mr Marc Kirsten, Head of Safety and Health for Anglo American, advised the committee at a public hearing:

At a senior management level we have total recordable injury frequency rates, which would include lost-time injuries, used as a measure. To give you some context, if you look at our incentive scheme for our senior leadership—senior management—about 60 per cent, give or take, of that is safety focused around much broader and more leading type projects. For instance, we have five critical projects in 2022 all related to key safety hazards and challenges. Although that more lagging indicator is still used, it is very much overwhelmed by a lot more leading. Certainly as an organisation—whether it is at a group level or at a steelmaking coal level here in Australia—we are reviewing, as part of our elimination of fatalities, the structure of our bonus and really shifting that to a much more proactive, leading focused structure—things such as hazard reporting, percentage of planned work and these sorts of metrics.¹⁰⁷

Anglo American also submitted ‘we have seen improvements in hazard reporting at the sites where lead indicators are in place within the bonus scheme.’¹⁰⁸

QRC advised its formation of a lead indicators working group to improve industry’s understanding of implementing lead rather than lag indicators.¹⁰⁹ At a public hearing, Mr Paul Goldsborough, QRC’s manager for health and safety policy told the committee:

I am conscious that we have seen no evidence that relates the bonuses to safety issues in the workplace. At the public hearings about a week ago the chief inspector of coalmines also was of that view. As a working group we were intending to focus on how we can get better clarity around lead indicators and how they can work and how we can bring the whole workforce along with those rather than focusing on the production bonuses.¹¹⁰

¹⁰³ BHP Group Limited and BM Alliance Coal Operations Pty Ltd, correspondence, 15 December 2022, p 4.

¹⁰⁴ See submissions 12, 17, 18, 23, and Peabody, correspondence 8 December 2022, p 5.

¹⁰⁵ Submission 18, p 4.

¹⁰⁶ Public hearing transcript, Brisbane, 28 November 2022, p 16, BHP Group Limited and BM Alliance Coal Operations Pty Ltd, correspondence, 15 December 2022, p 4, and Anglo American, correspondence, p 6.

¹⁰⁷ Public hearing transcript, Brisbane, 28 November 2022, p 24.

¹⁰⁸ Anglo American, correspondence, 12 December 2022, p 5.

¹⁰⁹ Submission 11, p 2.

¹¹⁰ Public hearing transcript, Brisbane, 28 November 2022, p 5.

5.2 Worker representative response

Submissions outlined a culture of deliberate underreporting of injuries to workers, in order to minimise injury incident statistics. Various, a retired paramedic, current coal mine workers and union representatives submitted their first-hand experience of this practice and the widespread fear of reprisal experienced by workers for either seeking medical attention for an injury, or fear for their ongoing employment for reporting an injury.

Coal mine workers and their associations submitted that the continuing use of lag indicators for safety, and safety bonuses which reward injury-free time, might condition the willingness of workers to report injuries. The MMMA submit that:

... there has been evidence of the manipulation and non-reporting of reportable incidents to massage the statistics to present a favourable outcome on safety and health statistics, thus accruing a more favourable financial outcome for those concerned. Lag indicators have for some time been largely discredited as opposed to the more meaningful lead indicators however, a combination of both can be effective in measuring the wellbeing of health and safety systems. Given safety and health is a core responsibility of every individual we cannot endorse the use of lag and or lead indicators as a remuneration component.¹¹¹

In a public hearing Mr Scott Leggett explained how one Queensland coalmine calculates its bonuses for operators, and subsequently supplied an example, see Appendix G. During questioning by the committee about bonus calculations, Mr Leggett said:

CHAIR: There are bonuses for production. What about bonuses for safety, for finding things that could cause an incident? Is there a relationship? Is one a higher bonus than the other?

Mr Leggett: That is difficult. Different mine sites have different bonus structures. You can get safety awards, money or gifts for not having a reportable injury—a lost-time injury—for 30 days, 60 days, 90 days or 100 days, however they want to measure it. Obviously that has a flow-on effect to people thinking, ‘Well, I am going to get a \$1,200 Engel freezer’ which was a reward handed out recently at my place. If Billy the blacksmith breaks his finger, he is going to be thinking, ‘Well, that’s coming next week. Maybe it’s not really that broken.’ It is funny you say that. It is a good question.

CHAIR: They are lag indicators.

Mr Leggett: This is from an underground mine—not my mine. I had a mate send it to me earlier this morning. That is their bonus for the week. They have a little table that gets placed out in the mine site: ‘Zero harm—zero reportable cases resulting from an intentional behaviour’. If they get none of them, they get \$100 a week. ‘Compliance—nil deliberate or careless breaches of their golden rules’. If they get none of them, they get \$50 a week. Then it is all about their metres: ‘If you go and hit your tonnes hard, boys, this is what you will get.’

CHAIR: Metres of production?

Mr Leggett: Yes. There are some quite good dollars there. Then down the bottom: ‘Efficiency—no deduction occurred due to rework’. There was no money taken away. Then: ‘Housekeeping—electrical standards in both development panel as per shift engineer audit’—and they had a HPI that week, a high-potential incident, cable damage, so they lost \$50. What sort of message do you think that sends? ‘If we have an accident at work, if we have an HPI, how about, ‘We just didn’t have it’ and that way we all get our money?’ That adds up. It does not sound much—\$50, \$100—but just that there that is \$200 essentially a week. What is that worth a year? It is not a bad little bonus, on top of their coal bonus of \$391 a week.

¹¹¹ Submission 10, p 9.

Mr Leggett further submitted that ‘safety should not have money attached to it in anyway shape or form, this needs to be legislatively called out, prescribed, monitored and reviewed quarterly.’¹¹²

The MEU propose the use of exclusively safety-focussed bonuses, for example, bonuses for ceasing work in unsafe conditions and the reporting of management overreach¹¹³ but were unable to identify any current Queensland sites where such bonus structures are utilised.¹¹⁴

5.3 Community response

Consistent with the MEU’s submission that ‘the use of HPis in any performance appraisal or incentive scheme can only have a negative effect on the desire to report such events,’¹¹⁵ Professor Andrew Hopkins from ANU submitted:

The problem here is that as soon as indicators are made to matter by inclusion in bonuses, the initial response is to manage the indicator, not the risk. In particular there will be a strong tendency towards non-reporting wherever that is a possibility, as well as other forms of manipulation, such as the re-classification of incidents. The reporting of many HPis (High Potential Incidents) is very vulnerable to these processes.¹¹⁶

5.4 Regulator response

At a public briefing, Mr Peter Newman, chief coal mine inspector, stated that ‘incentive schemes and bonus schemes for coalmine workers and executives within the coal industry vary across organisations and are very much a matter for those organisations. It is not part of the legislative framework.’¹¹⁷ In response to a further question from the committee regarding whether RSHQ had any concerns or investigations about the potential correlation of production versus safety, Mr Newman replied ‘Not in relation to incentive schemes at those mines, no.’ RSHQ additionally submitted:

RSHQ does consider that incentive schemes can have the potential to impact tensions between production and safety, and the reporting of safety matters, and supports the board of inquiry’s recommendations in relation to this issue.¹¹⁸

Committee comment

We note company submissions regarding how leading indicators are being increasingly incorporated into safety metrics, and strongly support industry’s move away from lag indicators and towards lead indicators when reporting on safety.

The committee notes that the regulator has no jurisdiction regarding the commercial decisions that coal mine operators make regarding employee remuneration. However, we also note that this type of issue is one that would benefit from collective tripartite collaboration, in the same way that industrial issues benefit from such tripartite discussions. We note that the QRC has established a working group to improve industry’s understanding of implementing lead rather than lag indicators that could also explore appropriate ways in which such indicators should be used in determining employee bonuses.

¹¹² Submission 13, p 2.

¹¹³ Submission 14, p 10.

¹¹⁴ Mining and Energy Union, correspondence, 12 December 2022, p 5.

¹¹⁵ Submission 14, p 4.

¹¹⁶ Submission 2, p 13.

¹¹⁷ Public briefing transcript, Brisbane, 24 October 2022, p 2.

¹¹⁸ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 4.

Recommendation 5

The QRC's lead indicators working group advance discussions on the appropriate use of safety metrics by industry in calculating employee bonuses, and provide a benchmarking report by end November 2023 to the CMSHAC;

6 Identification, classification and reporting, and responses to, incidents and failures of risk controls

A risk-based approach to health and safety requires an initial scoping assessment to identify potential risks associated with specific mining operations. Then a risk analysis is applied in which the magnitude of potential consequences and the likelihood of their occurrence are identified and classified, with critical controls to mitigate those risks then established. The effectiveness of those critical controls are then reviewed.¹¹⁹

RSHQ advises:

The Board of Inquiry made a number of findings and recommendations to improve safety and health and supported critical control management as a risk management process, focusing on identifying and managing the controls that are critical to the prevention of catastrophic events. It suggested a pathway for implementation of critical controls as a means of moving industry towards adopting HRO theory.¹²⁰

In its consultation regulatory impact statement for facilitating HRO behaviours in the Queensland mining sector, RSHQ explain how HRO theory supports better identification and control of hazards:

One of the five key principles of HRO theory is that organisations should be preoccupied with failure. This means that organisations should have systems and processes that encourage reporting hazards and near misses. There should also be a focus on the failings or errors that have occurred and an assessment of features of the systems in place that may increase the risk of those occurring again. The other key principles focus on:

- Sensitivity to operations – HROs strive to maintain a high awareness of how work is actually performed at the front line by encouraging operators to report on their experiences; they accept the likelihood of informal practices developing at the front line.
- Commitment to resilience – this refers to the understanding that people have of the unpredictability of systems and failures. They are prepared for failures and can respond rapidly and appropriately when they occur by self-organising into expert networks, then revert to normal conditions when problems are solved.
- Deference to expertise – HROs understand that the people with the greatest understanding of their role are those actually in the role - not the highest-ranking persons in the organisation. This preferences appropriate expert knowledge over hierarchy in managing risk. It requires conditions where persons can raise safety concerns without fear.
- Reluctance to simplify interpretations of issues or risks – HROs understand the complexity of operations and avoid making inappropriate assumptions when approaching management of risk. This means understanding the complexity of daily tasks and the integration of those tasks with

¹¹⁹ G Poplin, 'International evaluation of injury rates in coal mining: a comparison of risk and compliance-based regulatory approaches,' *Safety Science* 46.8 (2008), pp 1196-1204.

¹²⁰ Resources Safety and Health Queensland, *Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022*, p 8.

other teams. HROs recognise this may require redundancy in expertise, systems and competency, which they do not seek to avoid.¹²¹

Many of the recommendations of the Brady Review also focussed on appropriate incident investigation and risk controls:

Recommendation 2: The industry should recognise that the causes of fatalities are typically a combination of banal, everyday, straightforward factors, such as a failure of controls, a lack of training, and/or absent or inadequate supervision. Internal incident investigations in mining companies must strive to capture these combinations of causal factors, and avoid simplifying them to a single cause, such as human error, bad luck or freak accidents, which has the potential to mask the underlying system failures.

Recommendation 5: The industry needs to focus on ensuring the effectiveness and enforcement of controls to manage hazards. Given the increasing Serious Accident Frequency Rate, industry should implement more effective controls (such as elimination, substitution, isolation, or engineering controls). A significant number of the controls reported put in place in the aftermath of an incident were administrative in nature

Recommendation 7: In order to proactively assist the mining industry to operate more like High Reliability Organisations, the Regulator should play a key role in collating, analysing, identifying, and proactively disseminating the lessons learned from the incident and fatality data it collects from the industry.

Recommendation 8: The Regulator should develop a new and greatly simplified incident reporting system that is easy to use by those in the field, that is unambiguous, and that aims to encourage open reporting, rather than be an administrative burden to reporting.

Recommendation 9: The industry should shift its focus from LTIs and the LTIFR as a safety indicator.

Recommendation 10: The Regulator should adopt the Serious Accident Frequency Rate as a measure of safety in the industry.

Recommendation 11: The Regulator should adopt the High Potential Incident Frequency Rate as a measure of reporting culture in the industry.

6.1 Industry response

Coal operator submissions responded at length to this term of reference by explaining their individual processes for incident identification and classification and the application of their critical controls framework. Company submissions commented extensively on the changes that have been implemented to risk management frameworks since the release of the BOI Report. For example, Anglo American state:

In line with BOI Recommendations, Anglo American now classifies all general body methane exceedances as Anglo American High Potential Incidents (HPI). Each HPI is investigated through our Learning from Incidents (LFI) process. The occurrence of repeat HPIs is highlighted and discussed with senior management as part of monthly and quarterly performance reviews, and Significant Incident discussions. The LFI process contains the necessary investigation and analysis tools to identify and escalate the treatment of repeat high potential incidents.¹²²

Peabody Energy Australia submit:

As an essential part of our risk management approach, we are also specifically reviewing and updating our approach to learning from incidents. We have recently built a team of

¹²¹ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 13.

¹²² Submission 19, p 5.

investigation and human factors experts to ensure when we do have an incident, we achieve the best possible learning outcome and minimise repeats.¹²³

Kestrel Coal's submission provides extensive information on the level of incident investigation training given to its frontline leaders, operational leaders and middle management. This training considers incident identification, level of investigation required, escalation process, application of investigation tools and determining root causes.¹²⁴

QRC submitted that the benchmarking process it led with companies to understand HRO principles was also designed to assist companies to improve incident investigation.

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.¹²⁵

The role of the regulator in incident investigation was also noted by various coal mine operators. Mr Matt Cooper from Anglo-American advised the committee at a public hearing that:

A lot of what the inspectorate does today is very targeted. That would be my observation. By their very position, they see a lot across industry and they share that pretty regularly with us in both formal and informal senses. I would encourage them to keep doing what they are doing. The more we can learn from each other across the industry, the stronger we will be because the mechanisms that hurt our people end up being fairly similar time and time again. One of our passions at Anglo is that learning culture—trying to learn from our incidents and then put controls in place to avoid future repeats. Bringing that to a higher level, the more we can share and learn from each other, the safer we will be.¹²⁶

6.1.1 Critical controls

Coal mine operators talk to the increasing prioritisation of higher order controls in their hierarchy of critical controls, over lower order controls such as personal protection equipment (PPE) and administrative controls. BHP/ BMA submitted:

BHP and BMA have always had a strong focus, through risk management processes, on implementing higher order controls at a work site level. The introduction of our global Fatality Elimination Program (FEL) in FY2021 reflected our prioritisation of higher order controls at local levels. It was designed to accelerate the implementation of higher order controls and leverage best practice across BHP (and BMA) and industry. It supports a step-change towards our goal of zero fatalities across BHP (and BMA). The FEL includes improving controls by identifying new and improving existing controls with a focus on higher order controls (design, engineering, substitution or isolation controls) across our top 10 fatal risks. This is complemented by seeking to strengthen human performance to make sure controls are embedded, effective and adaptable.

BHP and BMA seek to prioritise higher order controls because they are more reliable and effective at managing the risk of fatalities and catastrophic incidents. Such controls focus on eliminating or substituting (wholly or partly) the hazard giving rise to the risk of fatalities with something that gives rise to a lesser risk, or isolating the hazard from any person exposed to it.¹²⁷

¹²³ Submission 19, p 6.

¹²⁴ Submission 20, p 4.

¹²⁵ Submission 11, p 1.

¹²⁶ Public briefing transcript, Brisbane, 28 November 2022, p 27.

¹²⁷ BHP Group Limited and BM Alliance Coal Operations Pty Ltd, correspondence, 15 December 2022, p 1.

Recommendation 6 of Part 2 of the BOI Report, was that the CSMH Act and CSMH Regulation be amended to require coal mines to develop critical controls with performance criteria in their Principal Hazard Management Plans, and which require:

- a. The SSE notify RSHQ of every failure of a critical control;
- b. The SSE to monitor and report on the effectiveness of critical controls on a monthly basis; and
- c. The CMO to audit critical controls under section 41(1)(f) of the CSMH Act.¹²⁸

This recommendation is proposed to be given legislative effect in RSHQ's CRIS. Some coal mine operators disagree with the need to legislate for stronger critical controls.¹²⁹ BHP/ BMA submit:

We do not consider these requirements to be purpose-suited for every circumstance and consider they will increase complexity and create an unnecessary administrative burden that is counterproductive to effective safety management. Such requirements would also run contrary to recommendation 8 of the Brady Review, which stated that the incident reporting system should be simplified to encourage open reporting, rather than be an administrative burden to reporting.

Instead, BHP and BMA consider that a recognised standard developed by RSHQ may provide the necessary information and flexibility for CMOs to develop critical controls with proportionate monitoring and reporting requirements. This option could also encapsulate appropriate auditing by RSHQ.¹³⁰

6.2 Worker representative response

Submissions from worker representatives identified a culture of under-reporting of incidents and a lack of supervisory capability to adequately investigate incidents and undertake and train workers in risk assessments. Submitters also flagged concerns that the regulator does not have capacity to appropriately investigate incidents and communicate learnings from them for the benefit of coal mine workers. For example, Mr Scott Leggett states:

Senior management will conduct investigations without the relevant parties required, will send through watered down information to regulatory bodies as they know that goes unquestioned, or it will be underreported. Information relating to other incidents from sister mines aren't shared, corrective outcomes aren't implemented or monitored or audited over longer periods.

Forget raising it with RSHQ, the inspectors are clearly that understaffed it's not funny, they push back to the site SSHR to fix, who to their credit try their best but are way outgunned on site and don't have support from anywhere else.¹³¹

6.2.1 Under-reporting

Similar to the under-reporting of worker injuries outlined in Section 5 of this report, under-reporting of incidents, including near misses, was noted by some submitters. Some submissions outlined specific, recent instances of coal mines failing to disclose serious incidents.¹³² The MEU support the notion that incidents are often underreported or downgraded, and cite recent examples of:

- a SSE trying to downgrade an incident from a HPI to a non-reportable incident, even after being advised by an inspector that the incident was a HPI

¹²⁸ Queensland Coal Mining Board of Inquiry, Report Part II, May 2021, pp 27-28.

¹²⁹ See submissions 17 and 19.

¹³⁰ Submission 17, pp 16-17.

¹³¹ Submission 13, p 3.

¹³² See, for example, submissions 4, 7, 13 and 24.

- an UMM not reporting a methane exceedance as a HPI and only reporting after being directed under s99(5), despite that site having several previous HPI methane exceedances.¹³³

The MEU also submit that companies under-report all types of injuries, including coal mine workers who are diagnosed with Chronic Obstructive Pulmonary disease.¹³⁴ The MEU provides the following suggestions to improve reporting of incidents:

- Tripartite review of legislated prescribed HPI's with the view to reduce ambiguity and provide consistency.
- Stricter enforcement of notification requirements under s198 of the CMSHA, there are penalty units for failure to report, however the MEU is not aware of them being applied.
- Enforcement of the requirement of the SSE to notify under section 198 of the CMSHA, not their subordinate or delegate, which is typically the case and often the cause of failure to comply with reporting requirements.
- Requirement of HPI notifications to be displayed on a notice board at the mine, similar to directives and inspection reports under section 69 of the CMSHA, so that all CMW's may monitor.
- Inspectors have additional power to decide the classification of an incident, where there is disagreement.¹³⁵

6.2.2 Regulator capacity

Submissions were made regarding the existing capacity of RSHQ to adequately investigate incidents. Worker submissions noted long delays in receiving reports from RSHQ about their investigations, a lack of available staff in the coal mine inspectorate to consult with and to adequately investigate incidents, insufficient unannounced inspections, and a reluctance to issue directives to correct unsafe mine conditions.

Mr Phil Nobes, a current Queensland coal mine SSE, advised in his submission that:

... there is currently a disconnect between RSHQ and sites between classification of incidents. This has been getting progressively worse since the BOI... Previously a site was able to call an inspector to discuss the potential classification of an incident or to report a non-reportable incident (NRI). Both of these situations now result in every one of these incidents being classified as a HPI by RSHQ representatives. The benefit of reporting incidents as NRI's is that incident learnings can be shared for incidents that do not otherwise fit the definition as an HPI. The benefit of being able to have a discussion with an inspector about the classification of an incident is to get another point of view and have open and honest conversations about more incidents within our industry. Now that all incidents just get classified as HPI's there is no point for a site to call an inspector for the discussion and guidance because you already know what their response will be, so sites are making those decisions without the previous amount of consultation with RSHQ.¹³⁶

Mr Andrew Iwers, who is a current SSHR at a Queensland mine, advised the committee at a public hearing:

When it comes to the inspectorate, there is another section in [the CSMH Act] which says the inspector must investigate any matter and report the results of the investigation to the mine and the mine record. I have had situations where this has not occurred when I have raised matters with an inspector, and those matters go back as far as 18 months.¹³⁷

¹³³ Submission 14, pp 5-6.

¹³⁴ Submission 14, p 5.

¹³⁵ Mining and Energy Union, correspondence, 12 December 2022, pp 4-5.

¹³⁶ Submission 21, p 3.

¹³⁷ Public hearing transcript, Brisbane, 10 January 2023, p 3.

The MEU indicated that s121 notices, in which an ISHR notifies the regulator under the CSMH Act of an inadequate or ineffective SHMS, are not being resolved in a timely manner.¹³⁸ Mr Jason Hill, a current ISHR and MEU representative, advised the committee at a public hearing:

I do not know if it is a resourcing issue. They have more inspectors now than they have ever had in my understanding, so you would have to talk to the RSHQ about that.¹³⁹

Mr John Sleigh from the MMAA told the committee during a public hearing:

The place where the number of mine managers has disappeared is in the inspectorate. Since 2015, there are something like five fewer qualified managers. At any time that I was there, between 2008 and 2015, there would have been somewhere between eight and 10 qualified mine managers in the inspectorate. At the moment there are three, and that includes the chief inspector and the deputy chief inspector - sorry, there are four. That is the place where the qualified people, the people who actually know how to do the operation, are not represented well.¹⁴⁰

The MMAA submit that:

Inspectors are an integral part in the overall health of the industry and there must be sufficient feet on the ground to ensure regular inspections and audits of SHMSs. It is noted that more inspectors have been recruited however, very few have First Class Certificates and we see that set to continue as the current remuneration package which is well short of the Moura 2 Recommendation.¹⁴¹

Mr Scott Leggett submitted that ongoing staffing issues within RSHQ, which were observed as early as 2008 in the Queensland Ombudsman's report titled *The regulation of mine safety in Queensland: a review of the Queensland Mines Inspectorate*, directly impact its capacity to appropriately investigate incidents.¹⁴² Mr Leggett told a public hearing that:

[RSHQ] also have other powers to issue directives. That hardly ever happens. What we do get is things called—and I cannot find anywhere in the legislation where they exist—recommendations and SPCs, special something and something. It is almost like someone gets a wet cabbage leaf, dips it in the water and says, 'You've been naughty and you've got 14 days to do something, but we only recommend that you do it.' You recommend safety? Either it is safe or it ain't safe. If it ain't safe, direct. Put that onus on them.¹⁴³

In response to further committee questioning about regulator capacity, Mr Leggett advised:

Mr HEAD: So should the Mines Inspectorate be more proactive in identifying ways for industry to improve and give that to not only the company but the industry as a whole in the whole state?

Mr Leggett: That is their whole job—absolutely 100 per cent hands down got to do it. Got to.

Mr LAST: Really quickly, what is your take on announced and unannounced inspections?

Mr Leggett: You have to bring on a hell of a lot more unannounced inspections. I feel for some of them. If I went back 25 years ago and a mines inspector turned up, announced or unannounced, especially announced, people would panic. There was respect and it was fair. Fair is not a big driver, but there was an absolute respect that they were not going to get away with it because these people knew what they were doing. Nowadays I have seen people just get up and walk out of the room on them, and that is when they know they are coming. If they turn up unannounced,

¹³⁸ Public hearing transcript, Brisbane, 28 November 2022, p 9.

¹³⁹ Public hearing transcript, Brisbane, 28 November 2022, p 9.

¹⁴⁰ Public hearing transcript, Brisbane, 28 November 2022, p 35.

¹⁴¹ Submission 10, p 5.

¹⁴² Public hearing transcript, Moranbah, 2 November 2022, p 10.

¹⁴³ Public hearing transcript, Moranbah, 2 November 2022, p 21.

they throw every obstacle out there to try and not even let them on site. They have functions and powers to do it, but they will be sitting at the gate for an hour, two hours, three hours.

CHAIR: While a water truck goes around or something.

Mr Leggett: Yes. There are some old inspectors that I have spoken to over the years and if they had a troublesome mine they would go out there and do their inspection and give it some directives. The next day they will drive past that mine to go and see the one that is two hours up the road, and on their way home they will just pop straight in and battle. They would do that a few times and the management structure then learned, 'We've got to show a bit of respect here. We've actually got to step up and do some of the stuff that's been asked of us. Otherwise we're going to get ridden and ridden and ridden.'¹⁴⁴

6.2.3 Supervisory capability

Worker representatives attribute the under-reporting of incidents and unsatisfactory incident investigation to the inadequate standard of mine supervisor knowledge and experience. Mr Andrew Iwers advised during the public hearing:

One of the biggest risk areas in the industry today is around supervision—more specifically, what happens after a coalmine worker gains the supervisor qualification. Just about anyone can answer the required questions to pass the test for what is required to be passed out as a supervisor on a mine site. Few of these people can actually balance the requirements of having to comply with their mine's safety and health management system and the competing demands of the coal company's production or maintenance KPIs they are asked to reach. Unfortunately, I have seen lots of supervisors who do not even understand or know the details of the relevant standard operating procedures, SOPs, which they work under. The statistics I have read in the Brady report that relate to either a lack of supervision or experience of the supervisor involved in fatalities clearly demonstrates this—I put those statistics in my original submission—yet within the industry very little appears to have changed to address or improve the situation around supervision.¹⁴⁵

The MMAA also raise concerns about the ability of some senior staff to adequately identify risk:

The qualification, experience, and training standard of supervisors, particularly in the open cut sector require urgent review. We would question the ability of some supervisors to adequately identify hazards and the necessary controls to minimise the risk to acceptable levels. Supervisors should not, in our opinion, be a substitute for statutorily qualified individuals.

...

The safety statistics of Queensland open cut mines when compared to NSW open cuts are stark. Given the resource is the same, as is the equipment and techniques being utilised the only real discernible difference is that NSW have retained statutory certification in open cut operations. Perhaps the reason for NSW's significantly better performance.¹⁴⁶

6.2.4 Declining risk controls

Mr Scott Leggett submitted that:

The coal mining industry is now that fixated on more production at the lowest cost possible that the last bits of fat have been well and truly removed from the stone... by this I mean the cheapest or easiest way to increase production while reducing costs are now by removing the controls that have been put in place over many years to prevent injury or accident.¹⁴⁷

The MMAA also observe a decline in risk controls:

¹⁴⁴ Public hearing transcript, Moranbah, 2 November 2022, p 21.

¹⁴⁵ Public hearing transcript, Brisbane, 10 January 2023, p 2.

¹⁴⁶ Submission 10, p 6.

¹⁴⁷ Submission 13, p 1.

Over the years we have witnessed a diminution in the quality of persons delivering Risk Management programmes. Trainers who have only just been assessed as competent are training trainers who in turn with little or no practical experience are then undertaking training classes. It thus appears the original intent and critical components are being lost as the training moves farther from the source of the recognised industry experts.

Some Risk Assessments that have been audited following incidents have detected fatal flaws in the process which in turn have led to incidents through the incorrect identification of a hazard or the application of ineffective controls. Those flaws have included the non-utilisation of subject matter experts, utilisation of a non-genuine cross section of the workforce, particularly the non-utilisation of individuals with practical experience in the matter under review.¹⁴⁸

6.3 Regulator response

RSHQ plays a fundamental role in incident investigation and reporting. In 2021-22, RSHQ issued 230 compliance directives, including 55 compliance directives to suspend mining operations. In respect of the 45 complaints it investigated, six resulted in compliance action being taken. RSHQ published five industry safety bulletins, 15 safety alerts and eight incident periodicals.¹⁴⁹ RSHQ state:

Inspections are typically undertaken by a single inspector and are focused on a particular hazard, activity, topic or work area. An inspection is usually completed in a single day but requires planning and follow-up action.

All inspections are planned but may be either announced or unannounced, depending on the inspection’s focus. We aim for 10-20% of inspections to be unannounced, based on sound regulatory practice. The actual number of unannounced inspections is driven by assessing current activities and risks in the resources sector.¹⁵⁰

The tables below provide statistics on coal mine inspections and audits¹⁵¹ conducted by RSHQ since 2019-20.

Table 1: Coal mine inspections conducted by RSHQ¹⁵²

Financial year	Actual inspections	Unannounced inspections (%)
2019-20	445	18%
2020-21	530	14%
2021-22	590	15%
2022-23	166 (470)*	14%

*projected figure of 470 inspections to be completed in 2022-23

¹⁴⁸ Submission 10, p 7.

¹⁴⁹ Resources Safety and Health Queensland, Annual Report 2021-22, p 24.

¹⁵⁰ Resources Safety and Health Queensland, *Compliance data*, <https://www.rshq.qld.gov.au/about-us/resources/publications/compliance-data>

¹⁵¹ Audits are in-depth reviews of safety and health management systems, risk management plans and procedures, and implementation. They can involve reviewing large volumes of information and discussions with site personnel. See <https://www.rshq.qld.gov.au/about-us/resources/publications/compliance-data>

¹⁵² Resources Safety and Health Queensland, *Compliance data*, <https://www.rshq.qld.gov.au/about-us/resources/publications/compliance-data>

Table 2: Coal mine audits completed by RSHQ ¹⁵³

Financial year	Audits
2019-20	96
2020-21	95
2021-22	99
2022-23	50 (100)*

*projected figure of 100 audits to be completed in 2022-23

RSHQ additionally advise:

The proportion of planned inspections and audits varies from sector to sector. For example, in the mineral mines and quarries sector, where we regulate thousands of smaller operations like quarries and small-scale mines, inspections take up a more significant part of our compliance program. However, for more extensive coal mining operations involving complex safety systems, a greater emphasis on audit is appropriate.¹⁵⁴

The rate of inspections and audits undertaken by RSHQ has not seen significant change since the BOI report, with the higher number of inspections in 2021-22 attributed by the regulator to ‘matters requiring a prompt and timely response from the regulator specific to certain mines.’¹⁵⁵

6.3.1 Complaints investigations

Complaint investigations are undertaken when RSHQ receives information about an alleged breach of the law or potential danger to workers. If not addressed adequately in the workplace, a coalmine inspector will log the complaint and conduct an investigation, which could involve a site inspection.¹⁵⁶ From 2018-19 to January 2023, the Queensland Mines Inspectorate received 297 complaints relating to Queensland coal mines – primarily from coal mine workers and relating to worker safety. Of these, 67 (22.5 per cent) resulted in compliance action, such as issuing a directive requiring action by mine management to reduce risk to workers.¹⁵⁷

Data from RSHQ suggests that there has been a decrease in the amount of investigations completed by the regulator in the last three years. Statistics regarding this are provided in the table below.

¹⁵³ Resources Safety and Health Queensland, *Compliance data*, <https://www.rshq.qld.gov.au/about-us/resources/publications/compliance-data>

¹⁵⁴ Resources Safety and Health Queensland, *Compliance data*, <https://www.rshq.qld.gov.au/about-us/resources/publications/compliance-data>

¹⁵⁵ Resources Safety and Health Queensland, *Compliance data*, <https://www.rshq.qld.gov.au/about-us/resources/publications/compliance-data>

¹⁵⁶ Resources Safety and Health Queensland, *Compliance data*, <https://www.rshq.qld.gov.au/about-us/resources/publications/compliance-data>

¹⁵⁷ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 2.

Table 3: Complaints investigated by RSHQ ¹⁵⁸

Financial year	Complaints investigated
2019-20	105
2020-21	64
2021-22	45
2022-23	15 (60)*

*projected figure based on 15 complaints investigated in the first quarter of 2022-23.

RSHQ advised the committee:

The Queensland Mines Inspectorate investigates every complaint it receives, as required by legislation. Following completion of the investigation, feedback on any action taken is provided to the person who made the complaint by email where available, or verbally. Inspectors will generally make an entry about the investigation activities in the mine record, even where the investigation does not necessitate attendance at site; however relevant details of any on-site investigation activity will always be entered on the mine’s record according to legislated requirements, in a way that protects the complainant’s confidentiality. Under legislation, the mine must ensure the mine record is available at all reasonable times for inspection by coal mine workers employed at the mine.

RSHQ is aware of witness testimony mentioning occasion where an inspector has not provided feedback on a complaint or entered relevant details in the mine record. RSHQ has reviewed its records and is aware of an instance where an inspector dealing with a complaint resigned at short notice and did not refer the complaint on at the time of their exit. When the matter was raised by the complainant with the regional inspector, it was promptly reallocated and addressed at a face-to-face meeting with the complainant and relevant site senior executive, and the outcomes recorded in the mine record.¹⁵⁹

6.3.2 Resourcing for coal mines inspectorate

In response to some of the issues highlighted by worker representatives regarding the coal mine inspectorate’s capacity, RSHQ advised that the number of inspectors employed by RSHQ had increased from 23 in November 2020, when the first BOI report was released, to 31 in January 2023.¹⁶⁰ Remuneration for coal mine inspectors has also increased since the first BOI report was released. RSHQ advise:

Following recommendations from the Queensland Coal Mining Board of Inquiry on 14 October 2021, the [Public Service Commission] PSC approved changes to the [attraction and retention incentive] ARI scheme that resulted in an increase to the remuneration of mines inspectors. These changes retrospectively took effect from 1 September 2021. As at this date, the total remuneration package payable to coal mine inspectors ranged from \$185,401 to \$357,100. A 2.5% base salary increase was applied from 1 March 2022, resulting in the current range of \$193,243 to \$373,558.

The current ARI scheme will operate for a period of five years and be subject to a mid-term review in June 2023. The review will consider the effectiveness of the scheme in attracting and retaining an effective inspectorate and the results will be provided to the Chief Executive of the PSC.¹⁶¹

¹⁵⁸ Resources Safety and Health Queensland, *Compliance data*, <https://www.rshq.qld.gov.au/about-us/resources/publications/compliance-data>

¹⁵⁹ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 2.

¹⁶⁰ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 1.

¹⁶¹ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 2.

RSHQ notes that the average separation rate— or percentage of employees who left the coal mine inspectorate - during 2020-2022 was 11%.¹⁶²

Regarding the technical qualifications currently held by inspectorate staff, RSHQ advise:

In January 2023, six inspectors held a first-class certificate of competency and eight held a second-class certificate of competency. Of the six inspectors that held a first-class certificate of competency, three also held a second-class certificate of competency.

The number of coal mine inspectors holding first-class and second-class certificates of competency has increased in recent years. In November 2020, 3 inspectors held a first-class certificate of competency and 4 held a second-class certificate of competency. Of the 3 inspectors that held a first-class certificate of competency, one also held a second-class certificate of competency.

While it is essential that the coal mines inspectorate includes holders of first-class and second-class certificates of competency, the skillset required for an effective regulator is much broader. In order to regulate the wide range of activities, hazards and risks in coal mining, the inspectorate needs, and has in its ranks, inspectors with specialism in electrical and mechanical engineering, occupational health and hygiene, geotechnical engineering, mine ventilation, and other areas.¹⁶³

RSHQ has commenced a two-year training program for some of its coal mine inspectors to obtain first-class certificates of competency for an underground coal mine.¹⁶⁴

6.3.3 Response to BOI Report and Brady Review

RSHQ advise in the CRIS that:

The Mines Inspectorate commenced and continues to engage, communicate with and monitor industry, with the goal of improving reporting of high potential incidents (HPIs), quality of investigations undertaken, and the effectiveness of controls implemented, by industry. RSHQ also established a Central Assessment and Performance Unit to provide key insights and data analysis on trending issues, industry insights and regulation effectiveness measures. The risk-based approach to inspections and audits has also been further refined.

These immediate non-regulatory responses have laid the foundations for industry to adopt pathways to HRO practices, while work on the regulatory proposals has progressed.¹⁶⁵

6.3.3.1 *Proposed legislative changes*

The CRIS regarding RSHQ's proposed legislative response to the BOI report and Brady Review has been discussed previously in this report. In respect of critical controls, the CRIS:

proposes legislative amendments to the Mining Safety laws to require critical controls to be a component in the SHMS for a coal mine, metalliferous mine, or quarry. Minimum requirements for the identification and monitoring of critical controls and notification in the event of a failure of a critical control will be clearly established through these amendments.

This proposal responds to expert recommendations made by the BOI and the Brady Review and seeks to add critical controls to mandatory risk control requirements under the Mining Safety laws, so that there is a clear focus on critical controls and their effectiveness. SSEs and

¹⁶² Resources Safety and Health Queensland, correspondence, 13 January 2023, p 2.

¹⁶³ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 2.

¹⁶⁴ Resources Safety and Health Queensland, Annual Report 2021-22, p 21.

¹⁶⁵ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 15.

operators would be required to ensure that critical controls are effectively identified, implemented, and monitored for effectiveness.¹⁶⁶

Regarding the capability of supervisory personnel, the CRIS proposes to strengthen the competency of personnel who occupy safety critical roles through legislative requirements for such personnel to hold certificates of competency.

The proposed amendments will ensure there are additional people with sufficient experience, expertise, status and understanding of statutory obligations working at an operational level in a wider range of key safety critical roles in the complex and hazardous mining process.¹⁶⁷

RSHQ also advise that amendments were made in 2022 to the Coal Mining Safety and Health Regulation to introduce a practicing certificate scheme that formalises continuing professional development (CPD) requirements for holders of certificates of competency.¹⁶⁸

To address under-reporting of incidents in the coal mining industry, the CRIS proposes various legislative amendments. One of the amendments will enable the Minister, the CEO of RSHQ and the Chief Inspector of coal mines to publish information about HPIs and serious accidents, the mine at which these occurred and the operator for the mine.¹⁶⁹ RSHQ advise:

in order to support RSHQ undertaking the important role of providing useful information and data to industry to prevent accidents and fatalities and to support industry becoming HROs, there is a need for further clarity in the legislation concerning what information can be publicly shared. Particularly in relation to HPIs and serious accident information.¹⁷⁰

Another amendment proposed in the CRIS would require coal mine operators to establish site safety and health committees (SSHCs) to improve the mechanisms available to workers to raise safety issues. The amendments will:

... enable a committee-based mechanism for workers and management to discuss safety and health issues related to their work sites.... An SSHC is a forum available to workers and their representative(s) at their discretion to ensure their safety concerns are addressed by site management. The provision for a SSHC under the CMSHA was recommended by the BOI [Part 2 Report] May 2021 (Recommendation 27). This mechanism will help to create feedback loops to management to encourage the reporting of 'bad news', consistent with HRO principles of sensitivity to operations and preoccupation with failure.¹⁷¹

¹⁶⁶ Resources Safety and Health Queensland, *Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement*, Consultation Regulatory Impact Statement, 2022, p 37.

¹⁶⁷ Resources Safety and Health Queensland, *Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement*, Consultation Regulatory Impact Statement, 2022, p 50.

¹⁶⁸ Resources Safety and Health Queensland, *Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement*, Consultation Regulatory Impact Statement, 2022, p 62.

¹⁶⁹ Resources Safety and Health Queensland, *Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement*, <https://www.rshq.qld.gov.au/resources/documents/mines-resources/Town-Hall-Presentation-Website.pdf>

¹⁷⁰ Resources Safety and Health Queensland, *Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement*, Consultation Regulatory Impact Statement, 2022, p 83.

¹⁷¹ Resources Safety and Health Queensland, *Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement*, Consultation Regulatory Impact Statement, 2022, p 72.

Committee comment

The committee notes the amendment that has been proposed by RSHQ in respect of legislating critical controls, and the opposition of various coal mine operators to such an amendment. We expect to deal with this matter fulsomely when any draft bill emanating from the consultation regulatory impact statement is referred to us. We note that same bill will likely address proposed amendments to enhance the incident investigation capabilities of personnel in safety critical roles, and mechanisms to improve the ability of workers to report safety concerns, both of which respond to concerns raised in submissions we received during this inquiry.

The prospect of incidents remaining less than thoroughly investigated, reported and classified remains an obstacle to an effective safety framework in the Queensland coal mining industry. We commend RSHQ for the significant work it has progressed since the BOI Report, particularly around facilitating high reliability organisation behaviours and modernising regulatory enforcement. However, the regulator's current capacity to provide timely and comprehensive reporting of incident investigations, and to conduct (particularly unannounced) inspections and audits at the rate which some submitters believe is necessary to prevent incidents and injuries, appears impaired. While we are encouraged to hear that the inspectorate now has more staff than it did at the time of the BOI report, this has not correlated to an increase in the amount of compliance and enforcement activities undertaken by the inspectorate since 2020.

There are many factors that contribute to the capacity of any regulator. Sufficient staff, technical expertise, willingness to utilise the full suite of available enforcement powers, and an industry responsive to its regulatory guidance and direction, are all critical success factors. We have heard worker accounts of regulator reluctance to issue directives, and a lack of good faith engagement with the regulator by mine operators.

We are not convinced that a lack of technical expertise on the part of the existing inspectorate staff is the root cause of any impaired capacity. Indeed we note that RSHQ is actively investing in training for its staff by pursuing an intensive program of certification of competency for its coal mine inspectors – something that industry has not prioritised to the same degree as evidenced in our recent consideration of the *Coal Mining Safety and Health and Other Legislative Amendments Act* in late 2022.

Not enough 'boots on the ground' appears a more logical explanation for lessened capacity, and one which has been recognised since at least 2008 when the Queensland Ombudsman reviewed the performance of the then Queensland Mines Inspectorate (QMI). We believe that more field-based resources are required to facilitate an adequate coal mine inspectorate compliance and enforcement program, and timely incident and investigation reporting. We acknowledge the difficulty of attracting staff to regional locations, especially ones where the salaries on offer with industry for similar qualifications outstrip inspector salaries. We recognise that remuneration is not the only reason why someone might take a job with the regulator, and that values alignment between the worker and the organisation is just as persuasive.

It is essential that the coal mines inspectorate asserts its value proposition to both prospective employees, and the coal mine operators it seeks to regulate. In part that might require more proactive use of the enforcement powers available to it. We received submissions that present day mine sites respond to inspections in a vastly different manner than the one in which they historically received unannounced inspections. In keeping with the theme of 'chronic unease' which characterised the industry-wide 2021 Safety Reset, we believe that an increase in unannounced inspections would help the regulator assert its value proposition across the coal mining safety framework, and encourage mine sites to treat any directions given to it by the regulator with appropriate gravity.

Recommendation 6

The Minister consider reviewing the rate of the regulatory health and safety fee payable by coal mine operators, to support an increase in resourcing to the coal mines inspectorate within RSHQ for an expanded compliance and enforcement program;

Recommendation 7

RSHQ increase the number of unannounced inspections it undertakes at Queensland coal mines to 25% of all inspections by the 2023/24 financial year;

7 Potential safety impacts of use of labour hire

The BOI considered the nature and prevalence of labour hire and contract work at Queensland mines and the risks that such employment arrangements pose to mine safety. It made the following findings in Part 2 of its report:

85. There is a perception among coal mine workers that a labour hire worker or contractor who raises safety concerns at a mine might jeopardise their ongoing employment at the mine. It has not been possible to assess how widespread that perception might be. However, the existence of a perception, no matter how widespread, creates a risk that safety concerns will not always be raised.

86. The perception that a labour hire worker or contractor might jeopardise their employment by raising safety concerns at a mine creates a risk that safety concerns will not always be raised.

99. Labour hire and contract work are two forms of casual employment, both characterised by their precarious, temporary nature. Labour hire is a triangular employment arrangement. Under such an arrangement, a labour hire agency supplies a worker to another organisation (the host). The labour hire agency is the worker's employer, while both the labour hire agency and the host have responsibilities to the worker.

100. Since the 1990s there has been a substantial increase in the proportion of labour hire workers and contractors at Queensland coal mines, although the proportions vary between sites. At Grosvenor, 76% of its total site workforce were contractors and labour hire workers engaged in mining tasks. Lesser, but still significant, proportions were in existence at Moranbah North, Grasree, and Oaky North mines. One Key is the dominant labour hire provider for the Anglo mines.

101. The Board considered the safety impacts associated with labour hire and contract work. One of the issues is the willingness, or reluctance, of labour hire and contract workers to raise safety concerns.

Part 2 of the BOI Report made the following recommendations regarding reprisal:

29. RSHQ takes advice, as required, and if necessary, takes steps to amend section 275AA of the Act to clarify the application of the reprisal offence, with a view to strengthening protections for workers. For example, this may involve including a definition of 'detriment'.

30. In relation to reprisal complaints, the Inspectorate undertakes prompt and thorough investigations, and provides appropriate feedback to complainants during the investigation and prosecution process.

The BOI also found (Finding 91) that there would be benefit to an extensive study by the CSMHAC on reporting culture in coal mines because of the fundamentally different views held in relation to the

safety risks associated with labour hire and contract work at mines.¹⁷² In this vein, the committee also received conflicting submissions from industry, coal mine workers and the MEU regarding the potential safety impacts of use of labour hire.

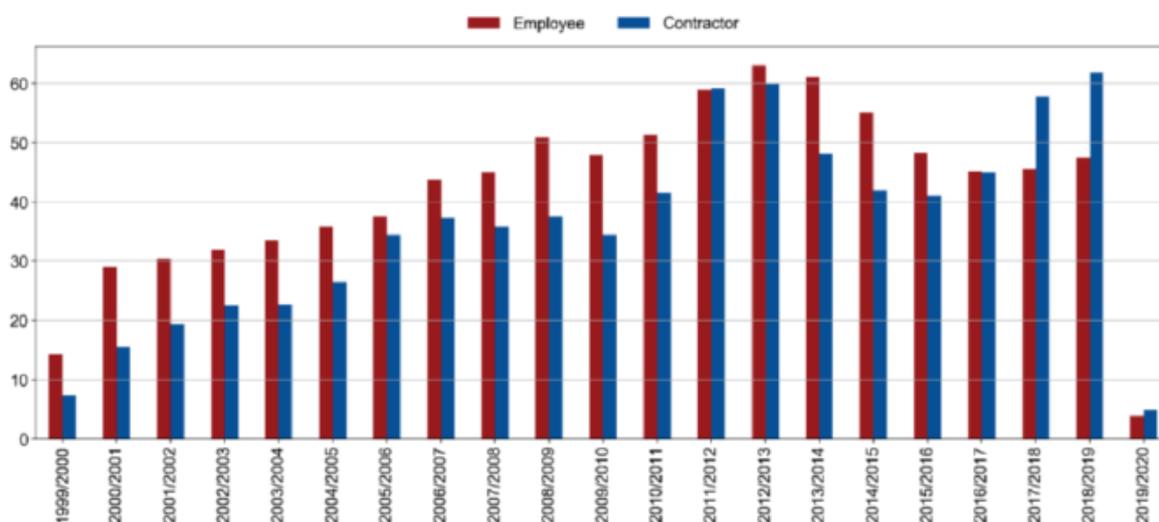
RSHQ advise in its CRIS proposal:

Given the high participation of contractor employees in the mining workforce, the mix of employment arrangements in mining could create a risk of fragmented reporting arrangements for safety and health issues. Data shows that the number of direct workers versus those employed through a non-permanent basis, such as contractors from labour hire agencies, is increasing [refer Figure 2 - Employee versus contractor worked hours]. While there are obvious operational advantages and efficiencies for mines engaging contract workers such as more flexibility in the employment basis there are also a number of disadvantages. The BOI considered some of those disadvantages, potentially negatively impacting safety, include:

- temporary and insecure work arrangements are associated with a higher incidence of injuries and fatalities, as well as poorer physical and mental health.
- labour hire workers are generally significantly less likely to have access to complaint mechanisms.
- due to the casual nature of their employment, labour hire workers may be afraid of raising health and safety issues for fear of losing their jobs.

This gives rise to a problem that complaints or concerns about health and safety may not be raised and addressed. This risk is increased where the operation includes non-mine employees (contractors or labour hire), due to real or perceived concerns about employment security.¹⁷³

Figure 2: Employee versus contractor worked hours - millions of hours worked by financial year by worker type¹⁷⁴



¹⁷² Queensland Coal Mining Board of Inquiry, Report Part II, May 2021, p 369.

¹⁷³ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland’s Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 69.

¹⁷⁴ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland’s Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 70.

7.1 Industry response

QRC submit that ‘there are no research findings to suggest that labour hire workers in Queensland’s mining industry feel disempowered to raise concerns.’¹⁷⁵ Further, it disputes the BOI finding ‘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.’¹⁷⁶

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.¹⁷⁷

In its written submission QRC additionally advised:

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 [finding 91] 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.¹⁷⁸

During a public hearing, QRC proposed the following recommendations to the committee:

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 evidence based policy development going forward.¹⁷⁹
3. that the Commissioner for Resources Safety & Health Queensland chair an annual industry forum on what strategies companies are using to encourage workers to speak up on safety issues. What is working and what is not working will assist companies in addressing the fear-of-reprisal issue.¹⁸⁰

Coal mine operators also engaged extensively with this term of reference in their submissions. The general theme of these submissions is that all workers at a coal mine site, regardless of their employment status, work under the same SHMS, and are treated the same. BHP/ BMA submit that:

The systems and culture that characterise our approach to safety apply across the workforce regardless of employment status. All workers – whether employees, contractors or sub-contractors, or workers engaged through labour hire agencies – are treated the same when it comes to safety, with the same requirements around training, competency and inductions, and the same expectations regarding their contribution to safe operations and to speak up about any safety concerns they may identify.

¹⁷⁵ Submission 11, p 6.

¹⁷⁶ Submission 11, p 5.

¹⁷⁷ Submission 11, p 5.

¹⁷⁸ Submission 11, p 7.

¹⁷⁹ Submission 11, p 6.

¹⁸⁰ Public hearing transcript, Brisbane, 28 November 2022, p 3.

All coal mine workers at BMA sites, including contract workers and labour hire workers, undergo a comprehensive core site induction process. All of our people, including those working at our mines under contractor or labour hire arrangements, are fully informed about the fundamental importance of the reporting of safety concerns.¹⁸¹

Mr Matt Cooper from Anglo American advised during a public hearing:

My view is that there is one safety health management system that is applicable at the mine that applies equally to Anglo employees, contractors and labour hire. Our expectation is that the felt experience for anyone at our mines is the same and our obligations and obligations of the people involved are the same under the safety health management system.

We are aware of the perception of differences between different types of employees. A lot of our cultural work is aimed at making sure we build that 'one team' culture where everyone feels safe to speak up around safety and everyone feels safe to stop the job, seek help and make sure that when we progress a job it is done in a safe way, with an acceptable level of risk. That is where a lot of work is in the cultural program.¹⁸²

Peabody submit that from the total reportable incidents data at Peabody sites since 2019, there has been no discernible trend which suggests that contractors and/or labour hire workers are involved in relatively more total reportable injuries (TRI) when compared to [Peabody] employees.¹⁸³

The committee heard evidence from Anglo American that it was increasing the number of permanent employees at its Grosvenor mine:

Earlier this year, we announced the creation of around 200 new permanent jobs at our Grosvenor Mine, to be progressively offered at Grosvenor Mine across our longwall, maintenance, out bye, development and supervisory teams.

The decision followed a review of the mine's employment model, which began earlier this year, and included looking at the best ways to support our Grosvenor Mine workforce into the future. This new model is aligned with our other underground operations where a majority of core, permanent workforce is supported by a small section of labour hire employees and by mining services contractors. We believe it will support career development and operational stability, helping to underpin the successful operation of the mine going forward.¹⁸⁴

When asked about this at a public hearing, Mr Matt Cooper from Anglo American advised:

We have our first 20 people on board and we would expect to fill out the 200 very shortly. The driver for that came after a review of our employment model at Grosvenor. We felt, for the benefit of those people in looking at their future interests plus the future interests of the mine, we were better off moving to a model that had an increased portion of Anglo American people. That said, there will be an ongoing role for small numbers of labour hire and specialist contractors within that mine going forward, but the balance will shift to look more like our other underground mines, which have a majority of Anglo American employees, again assisted by labour hire and service contractors. We think that is a more sustainable model in the world that we foresee going forward.¹⁸⁵

¹⁸¹ Submission 17, p 15.

¹⁸² Public hearing transcript, Brisbane, 28 November 2022, p 22.

¹⁸³ Submission 18, p 3.

¹⁸⁴ Submission 19, p 6.

¹⁸⁵ Public hearing transcript, Brisbane, 28 November 2022, p 22.

7.1.1 Reprisal

Coal mine operators responded to the BOI finding about reprisal by discussing their no-tolerance approach and additional measures being implemented to combat this at coal mine sites. Peabody submits that ‘no adverse action is ever taken against a coal mine worker for raising a legitimate safety issue or reporting a safety incident. To the extent a worker was targeted for reporting a safety incident, this would be dealt with as a serious disciplinary matter.’¹⁸⁶ BHP/ BMA submit that it ‘has developed and has begun delivering a training course for supervisors that includes information on BHP’s policies against retaliatory conduct and expressly directs supervisors to monitor their teams for such behaviour.’¹⁸⁷

Regarding the BOI recommendation to strengthen legislative protections against reprisal, BHP/BMA further submit:

- (a) BHP and BMA consider that the current statutory regime for escalation and resolution of safety matters through the functions and powers of SSHRs and ISHRs is effective;
- (b) BHP and BMA also consider that there is not a need to implement further reform to the reprisal provisions, on the basis that the existing reprisal protections within the CSMH Act and elsewhere are strong.¹⁸⁸

7.2 Worker representative response

Worker representatives submit that the disparity of pay and conditions between direct and indirect employees, whether contractors or labour hire workers, leads indirect employees to prioritise their future employment prospects over their willingness to report safety concerns.¹⁸⁹ This view was not supported by the MMAA:

As to the oft claimed fear of reporting safety concerns there are means whereby an individual or individuals can make anonymous reports, those being either through Government Inspectors or through the local SSHR or Union ISHR. There is no reason why safety concerns should not be reported.¹⁹⁰

The MEU advised the committee during the public hearing that:

Contract and labour hire employees are often given the option of remaining casual or taking a cut in pay to be classed as permanent just to receive the normal benefits they are entitled to such as sick leave and annual leave. Many forego this just so they can receive a comparable wage to permanent mine employees. If they remain classed as casual they can be dismissed with little or no notice, no reason given and no access to unfair dismissal laws. Even contract or labour hire mine workers who are permanent have in their contract arrangements where they can be moved to different sites, even different states, without choice, limited notification and no reason given.

...

Another issue is training. Training takes time and expense and will impact the bottom line in the short term. With the high rate of labour turnover for labour hire and contractors, this cost

¹⁸⁶ Peabody Energy Australia Pty Ltd, correspondence, 8 December 2022, p 3.

¹⁸⁷ Submission 17, p 15.

¹⁸⁸ Submission 17, p 17.

¹⁸⁹ Public hearing transcript, Brisbane, 28 November 2022, p 8.

¹⁹⁰ Submission 10, p 10.

can often not be recouped in the longer term so contract or labour hire companies limit this cost and as a result they are not trained to the same level as permanents.¹⁹¹

Mr Andrew Iwers, a current SSHR at a Queensland mine, told the committee:

I have also seen labour hire and contract workers being treated differently when it comes to safety; for example, if their standard of safety performance is deemed unsatisfactory or they challenge a direction given to them which they believe is unsafe, they do not come back to that site again.

In the past I have challenged a site senior executive, SSE, over this type of behaviour. His response to me in that conversation was that he was not their employer and it was up to their labour hire employer or their employer to deal with them. Labour hire workers and contractors appear to be an easy target for compliance KPIs.

...

The general feeling that I see and hear with labour hire workers is that they are not willing to raise too much noise because all they want to do is get a permanent job. If they make too much noise in the time between permanent jobs being offered, then there is less chance of them being offered a permanent job because they may be seen to be a troublemaker or somebody who may not want to comply with a direction. For a lot of these people in that employment situation, they may not be able to get a mortgage or a loan or that type of thing so that they can lead a life like everyone else and the people they work next to because they do not have permanent employment. Those things in the background will influence their decisions on whether they should speak up or not.¹⁹²

Mr Scott Leggett submitted to the committee that in his role as a site safety representative he has shut down operations, and then been congratulated by labour hire people who thank him for doing so, then grab their shirt badge as justification when asked why they did not shut operations down themselves.¹⁹³

The MEU submit that coal mine operators 'refuse to acknowledge these inherent risks that are created through labour hire arrangements... instead, they promote a self-serving view that all workers in the coal industry are safe because they operate under the same systems and health and safety processes.'¹⁹⁴ The MEU produced the statistics in the table below to the committee to demonstrate that indirect employees (either contractor or labour hire) are disproportionately represented in accidents on Queensland mine sites.

¹⁹¹ Public hearing transcript, Brisbane, 28 November 2022, p 8.

¹⁹² Public hearing transcript, Brisbane, 10 January 2023, pp 2-4.

¹⁹³ Public hearing transcript, Moranbah, 2 November 2022, pp 14-15.

¹⁹⁴ Submission 14, p 2.

Table 4: Number and per cent of serious accidents in Queensland coal mines, contractors and employees ¹⁹⁵

Number of serious accidents in Queensland coal mines*	Contractor		Employee		Total number
	Number	%	Number	%	
2020	23	70	10	30	33
2021	45	79	12	21	57
2022	33	83	7	18	40
Total	101	78	29	22	130

* Serious accident is defined by section 16 of the CMSHA. May include multiple coal mine workers for the one serious accident such as Grosvenor in May 2020 where 5 contractor coal mine workers were seriously injured.

7.2.1 Reprisal

A survey of 1010 underground and open cut Queensland coal mine workers in 2019 by the MEU indicated that 40% of workers fear reprisals if they speak up about safety, with this number increasing to 59% if that worker is casually employed.¹⁹⁶ Eighty per cent of coal mine workers surveyed indicated that their biggest safety concern is companies valuing production over safety, closely followed by fear of reporting safety concerns (66%), procedures not being followed (49%) and inexperienced supervisors (47%). A more recent survey of 500 coal mine workers in 2022 by the MEU indicated a decrease in the number of workers who fear reprisal to 34% of permanent workers and 46% of casual employees.¹⁹⁷ The MEU told the committee at a public hearing that:

The other issue in terms of reprisals is that there have been over 150 reprisal complaints to the inspectorate recently with not one prosecution. What that shows is that reprisal exists, but it is too hard to prosecute. There is no punishment for committing reprisal, so again the system is against labour hire contractors.

...

We do need better tools for addressing reprisal in legislation. They are not effective enough at the moment. We deal with reprisal complaints all the time. Sometimes we are told that it is not even a reprisal action unless the person is terminated, so it is very hard to prove. The way the legislation is written now, it is very hard to get a prosecution of reprisal. It is easy to prove—the evidence is there—but it is hard to get a prosecution under current laws. We need better laws around reprisal. There is some suggestion of reverse onus of proof rather than reasonably practicable. We need some definition where if it is likely that it has happened then there can be a prosecution, not it does not have to be 99.999 per cent likely. If it is more likely than not, there can be a prosecution. Sometimes I think the inspectors are a bit restricted by the tools they have to take reprisal further.¹⁹⁸

¹⁹⁵ Mining and Energy Union, correspondence, 12 December 2022, p 6.

¹⁹⁶ Mining and Energy Union, correspondence, 12 December 2022, 'Queensland coal mineworkers' safety survey results, 29 July 2019', pp 3-4.

¹⁹⁷ Mining and Energy Union, correspondence, 12 December 2022, 'Queensland safety survey', December 2022, pp 6-7.

¹⁹⁸ Public hearing transcript, Brisbane, 28 November 2022, pp 9-10.

The MEU recommend that:

Enhanced protections against reprisal should be introduced including clarification that the protections apply to threats to take reprisal action, a shifting onus of proof similar to s 361 of the FW Act, an increase in penalty units to 300, and prohibitions on the holding of statutory positions for those who contravene the CSMH Act by taking reprisal action.¹⁹⁹

7.3 Community response

Isaac Regional Council, a jurisdiction which takes in Moranbah, Queensland's largest coalmining community, provided evidence that contractors are involved in a large majority of serious incidents, and that, generally, labour hire workers are more likely to be injured at work compared to direct hire employees.²⁰⁰ The Council's submission attributed the higher incidence of labour hire worker injury to 'contested or disarticulated responsibility for health and safety management between host companies and labour hire agencies... labour hire workers are often reluctant or unable to raise OHS issues, due to their vulnerability to termination.'²⁰¹ Isaac Shire Council also submitted that 'high levels of work-related incidents and the greater volume of traffic created by labour hire creates great safety concerns and are justly evidenced by recorded fatalities on the Peaks Downs' Highway.'²⁰² The Council also flagged how large mobile populations of labour hire workers, employed on fly-in/fly-out (FIFO), drive-in / drive-out (DIDO) or bus-in/bus-out (BIBO) arrangements, can impact on regional health services, which are only funded on permanent population levels, therefore compromising the availability of health resources to residents of host communities.²⁰³

Mayor Anne Baker of Isaac Regional Council advised the committee during a public hearing:

One of the main differences in our view between being on contract and having a permanent shirt on your back is that a contractor has a job this week and may not have a job next week, and if they were to put forward any discrepancy they see in terms of safety there could be repercussions in terms of keeping their job.²⁰⁴

7.4 Regulator response

Regarding the QRC proposed recommendation that RSHQ break injury data down between contractors and labour hire workers to ensure evidenced based policy development, Mr Robert Djukic, chief operating officer of RSHQ acknowledged during a public hearing that it does not break down injury data into different temporary employment types.

RSHQ has commenced development of a system which will better enable us to collect that high level of granularity and make the reporting of that information more user-friendly for industry. As a general comparison between one group and another—my colleague may correct me—we do not have the ability to say that generally one group's performance is better than another.²⁰⁵

Regarding the QRC proposed recommendation for an annual industry forum around encouraging workers to speak up for safety, RSHQ submit:

While RSHQ does not query the principle of an industry forum to assess the effectiveness of strategies to encourage workers to speak up on safety issues, it is important, if the objective is to combat perceptions of fear of reprisal for raising safety matters, that industry be seen to take an initiating and leading role in promoting this work.

¹⁹⁹ Submission 14, p 6.

²⁰⁰ Submission 7, p 3.

²⁰¹ Submission 7, p 4.

²⁰² Submission 7, p 6.

²⁰³ Submission 7, p 6.

²⁰⁴ Public hearing transcript, Moranbah, 2 November 2022, p 6.

²⁰⁵ Public briefing transcript, Brisbane, 24 October 2022, p 3.

A Commissioner-convened and chaired forum may give rise to a perception of industry taking a passive or compliant role and may not succeed at increasing worker confidence to the same level as initiatives driven by industry itself at local levels/workplaces.

RSHQ is aware the Commissioner has produced and published a series of videos featuring industry, RSHQ and union representatives' personal insights into the importance of reporting and speaking up on safety matters, to increase awareness across the industry.²⁰⁶

7.4.1 Reprisal

RSHQ advised the committee that:

There are numerous potential reasons why workers may not come forward with safety issues, in addition to perceptions of fear for their employment – these could include a lack of awareness of ways to raise issues, practices that are not user-friendly or make it cumbersome to raise issues and social factors such as peer-pressure or self-consciousness. RSHQ considers it is therefore simplistic to draw conclusions about the prevalence fear of reprisal from the number of complaints received.

Addressing perceptions of fear of reprisal for raising safety issues requires establishing an environment of psychological safety. It is unlikely to be sufficient to simply state an intent or policy not to take reprisal action where worker trust may be lacking. Designing decision-making environments which create positive influences or 'nudges' to workers to report safety matters must occur at the local level to address perceptions giving rise to fear.²⁰⁷

The CRIS proposal from RSHQ includes legislative amendments to strengthen protection for workers from reprisal actions when raising safety issues:

To maximise reporting workers must feel secure enough to raise safety concerns without fear of reprisal. To be effective, these offences should carry significant penalties and as such a maximum penalty of 1,000 penalty units are prescribed for the equivalent offence under the WHSA. Both the CMSHA and the MQSHA replicate this level of penalty for reprisal offences.

Increased protection from reprisals is aimed to provide the workers with confidence when reporting safety related issues with the ultimate aim of increasing the level of reporting and identifying potential failures which, if undetected, could lead to serious incidents. Increased reporting supports an improved safety culture and improved safety and health outcomes in the resources sector. As evidenced in the Brady Review and supported by the BOI findings increased reporting will assist with increased safety outcomes and help the resources industries become HROs.²⁰⁸

Another legislative amendment proposed in the CRIS to improve the ability of all workers to report safety concerns through the establishment of site safety health committees was noted in Section 6 of this report.

7.4.2 Proposed legislative changes regarding labour hire

RSHQ advises:

On the evidence before it, the BOI found that labour hire agencies providing workers to the coal mining industry may have no clear and express obligation to ensure that the workplaces into which they send their employees are as safe as reasonably practicable and may be entirely unaware of the occurrence of incidents that pose a risk of significant adverse effects to the

²⁰⁶ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 4.

²⁰⁷ Resources Safety and Health Queensland, correspondence, 13 January 2023, p 3.

²⁰⁸ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 126.

safety and health of those employees. The BOI were of the view that further coverage of labour hire obligations was needed in the legislation.²⁰⁹

The CRIS proposes legislative amendments to ensure there is clarity concerning the definition of contractors and labour hire agencies in the CSMH Act, and their health and safety obligations:

It is proposed that the definition of ‘contractor’ be amended to be non-exhaustive and include an entity that provides a service, performs work or provides labour to a coal mine. A note could also be inserted which provides an example of a contractor as a labour hire agency. The service provider provisions could then be removed.

The definition of a mine worker could then be amended to remove reference to a service provider or employee of a service provider and to refer to a contractor or employee of a contractor or a person otherwise engaged by a contractor. The advantage of this approach is that it eliminates the distinction between contractor, service provider and labour hire companies and the resulting confusion about which category a company falls into where there is no apparent need to provide differing obligations. Minor supporting consequential amendments would also be made.

It is also proposed that amendments will be made, similar to those outlined in section 106 of the CSMHA and section 105 of the MQSHA, requiring the SSE to notify a contractor (e.g. labour hire agency) who employs or otherwise engages a coal mine worker when there is an injury or illness to a worker that causes absence from work; a HPI; or any proposed changes that may affect the safety and health of persons at the mine.²¹⁰

Committee comment

The consistent tone of coal mine operator submissions that temporary workers are not treated differently from employees because of the overarching operation of ‘one SHMS’ is dissonant to the submissions from coal mine workers and their representatives regarding the fear that temporary workers hold for speaking up about safety. The committee wishes to thank the individual coal mine workers who made submissions to this inquiry. We acknowledge that in many instances, those workers wished to remain anonymous for fear of repercussions on their employment. For those coal mine workers who did make public submissions, we note their stated concerns that, in doing so, they were potentially risking their jobs. In our view, this indicates that reprisal, whether perceived or actual, is present in the Queensland coal mining industry. We heard accounts of labour hire workers being dismissed from site immediately for flagging safety issues, and temporary employees who raise safety concerns being characterised as otherwise unsuited to their role, and terminated. This must stop. More transparent investigation, resolution and reporting of reprisal investigations is necessary, and we support the legislative amendments being proposed by the CRIS to address this.

We commend the research planned in 2023 by the CSMHAC regarding the reporting culture in Queensland coal mines, and believe that industry should make a sufficient financial contribution to this research to ensure a thorough, mixed-method empirical study can be undertaken. However we also note that industry-sponsored research can sometimes be perceived as less than independent and it is appropriate for the Commissioner for Resources Health and Safety, as the chair of the tripartite CMHSAAC to be the sponsor of the research and determinative of the study’s final scope. We do

²⁰⁹ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland’s Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 24.

²¹⁰ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland’s Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 104.

however advocate for the Commissioner to consider our suggestions with respect to the study proposal:

1. The industry must be accountable for facilitating the effective participation of its workforce, particularly its temporary and indirect employees;
2. ISHRs and SSHRS are the ‘eyes on the ground’ when it comes to safety and coal mine operators and the union should ensure that the participation of these personnel in the study is appropriately resourced, facilitated, and protected; and
3. Community representatives to be consulted for the study as concerns about safety do not stop at the gate of a mine.

While it is our understanding that this study is already underway, we encourage the Commissioner to consider whether any scope revision and necessary funding increase might be required, particularly given the synergies between the existing scope of the present study as we understand it, and Recommendation 4 of our report that *the CMSHAC commission independent research into the impact of coal production rates on safety risk management in Queensland coal mines. Coal mine operators must facilitate sufficient access to, and protections for, coal mine workers who elect to participate in this research.*

Recommendation 8

The CMSHAC review the terms of reference for its current study into coal mine safety reporting culture to additionally address the deficit of research around production and safety conflicts, and reprisal against workers who raise safety issues, which we have raised in this report;

Recommendation 9

The QRC ensure that its coal mine operator members proactively engage and supply data to assist with the research to be conducted by the CMSHAC. The QRC is to report on its website which coal mine operators have participated and data on each coal mine operator’s participation (e.g. number of workforce engaged, employment basis of participants, work role of participants) by end November 2023;

Recommendation 10

The Minister consider amendments proposed in the Consultation Regulatory Impact Statement strengthening protections against reprisal with a view to legislatively implementing them;

8 Site safety and measures to separately address process and personal safety

Following on from the BOI Report, the Minister initiated an industry-wide safety reset in the second half of 2021. This safety reset focused on the theme of “Chronic unease: improving safety culture through better hazard and incident reporting.” The Reset focussed on pre-cursors to incidents and learning from these, which was a key theme in the Brady Review, and the importance of reporting.²¹¹ The QRC advised:

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

²¹¹ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland’s Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 14.

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.²¹²

Two industry wide Safety Resets were previously held in 2019. RSHQ advise:

1,197 safety reset sessions were held across the state. The safety resets provided an opportunity for all Queensland mine workers to reflect, reset and refocus on safety, as well as have their say on a range of safety issues. Attendees were provided with a package of information under the reset plan open for discussion. More than 52,000 mine and quarry workers joined employer representatives and union representatives attending safety reset sessions and took time to focus on what it means to be a safe industry, free of fatality and serious harm. Attendees had the opportunity to make confidential comments about safety. Anecdotal feedback, based on issues raised from the floor during safety resets was that there was a worker perception that safety concerns could not be raised without fear of reprisal.

Other key issues identified by participants included the importance of leadership in addressing safety issues, the importance of an experienced, well-trained permanent workforce in improving safety, the need for improved quality of training and more frequent training, and the need for improved procedures.²¹³

Part 1 of the BOI report distinguishes between personal and process safety:

Personal safety strategy focuses on human behaviour, including expected safety behaviours and minimum standards of safety for all persons... includes scorecards, workforce engagement, non-technical skills, challenge testing and targeted visible leadership.

The process safety strategy focuses on higher order controls and is supported by fatal hazard protocols, legislative compliance, critical control management (CCM), High Potential Risk Incident (HPRI) reporting and assurance processes.²¹⁴

Recommendation 18 of Part 1 of the BOI Report was that industry adopts strategies and performance measures to address process safety and personal safety separately.

8.1 Industry response

When questioned by the committee about the utility of industry-wide Safety Resets, Mr Ian McFarlane from the QRC advised ‘the industry has decided it will do further safety resets, but to maximise their impact it is not the sort of thing you do as a routine. You do it as an exception rather than the rule.’²¹⁵

In terms of strategies used by industry to address process and personal safety separately, the majority of coal mine operator submissions indicated increasing use of higher order controls to manage process safety.

Anglo American’s Elimination of Fatalities program includes specific streams of work to review and assess process safety risks within the business so that they can be addressed separately to personal safety risks.

Anglo American has developed a process safety Technical Standard and we are working with Group experts to review and develop our knowledge and experience in the implementation of Process Safety concepts with a focus on Principle Hazards.²¹⁶

²¹² Submission 11, p 3.

²¹³ Resources Safety and Health Queensland, Facilitating High Reliability Organisation behaviours in Queensland’s Resources Sector and Modernising Regulatory Enforcement, Consultation Regulatory Impact Statement, 2022, p 14.

²¹⁴ Queensland Coal Mining Board of Inquiry, Report Part I, November 2020, p 156-157.

²¹⁵ Public hearing transcript, Brisbane, 28 November 2022, p 5.

²¹⁶ Anglo American, correspondence, 12 December 2022, p 8.

BHP/ BMA submit that:

BHP/BMA addresses process safety by managing material risks and high consequence events across our operations through the application of our Risk Framework which applies across the whole organisation. Within this framework is the requirement to identify critical controls for risks with fatality potential. The framework also requires that a critical control must have a design standard, operating standard and verification approach...

BHP/BMA addresses personal safety through a number of processes. These include conducting localised risk assessments with input from workers, and running the Field Leadership Program and the BHP Operating System. These systems identify positive and at-risk behaviours at the individual worker level and seek to make improvements directly.²¹⁷

8.2 Worker representative response

In terms of process safety, a coal mine worker submitted that at some mines, safety inductions are not being correctly completed, or that SHMS are inadequate.²¹⁸ At a public hearing, Mr Scott Leggett observed the de-escalation of process safety on mine sites, stating that:

with our hierarchy of controls, that is what they are doing: they are reducing our hierarchy of controls. Even through methods of mining, processes, geotechnical stuff—you name it—we are actually removing our higher level controls and replacing them with administrative and human behaviour.²¹⁹

Mr Andrew Iwers drew the committee's attention to the porosity of process safety measures in reference to night shift:

There is an old saying you may have heard in the industry about someone having a night shift ticket or 'Give it to night shift. They will get it done because the eyes are not there watching them.' We say one thing about doing it safely and we happily accept the benefits of those jobs getting done but we know that things may not have been done right to achieve those outcomes.²²⁰

Mr Iwers in his written submission stated:

As an SSHR, I have experienced harassment, bullying, gas lighting and personal threats from many different levels of management during my time carrying out this voluntary role. I have even witnessed an SSE who openly stated he didn't care if the mine didn't have any SSHR's.

It is my belief that the greatest impediments to ensuring ongoing safety sustainability within the coal mining industry are:

- Ensuring coordinators, supervisors, middle and upper management are conversant with the risk management processes at the mine they work at, especially those who are the owners of the documents. On too many occasions I have seen managers and superintendents that are unaware of risk management controls within documents that are directly under their control, as well as supervisors and coordinators who have no idea of the requirements of the procedures when supervising tasks.
- The ongoing rhetoric around risk management during pre-starts and toolbox talks, yet this disappears once CMW's are actually doing their job, and it's a case of "just getting it done"
- The lack of documented mentoring/training for inexperienced supervisors within the industry. In the Brady report, it states that 45% of fatalities where supervision was identified as ineffective, supervisors had less than 1 year experience. This

²¹⁷ BHP Group Limited and BM Alliance Coal Operations Pty Ltd, correspondence, 15 December 2022, p 7.

²¹⁸ Submission 4, p 1.

²¹⁹ Public hearing transcript, Moranbah, 2 November 2022, p 19.

²²⁰ Public hearing transcript, Brisbane, 10 January 2023, p 6.

clearly demonstrates that supervisors who are new to supervision should be mentored and coached, not just signed off and set free to “supervise”

- Increased of inclusion of SSHR’s during risk assessment, procedure development/review, incident investigation processes on a more regular basis, not when it suits
- A more regulated way to ensure a balanced the cross section of CMWs are represented during risk assessments, instead of having attendees stacked with CMW’s who are either office based, apprentices, labour hire workers or inexperienced with the hazard being risk assessed, and are making up numbers to ensure compliance.²²¹

In responding to this term of reference, the MMAA submit that there are several areas that can ameliorate safety and health outcomes, including:

- An effective regulatory regime,
- a well-resourced and competent inspectorate,
- competent and statutorily qualified management,
- a well trained workforce and one where all personnel are hazard aware,
- a risk based safety and health management system (SHMS) where all hazards are effectively identified, and effective hierarchy of controls are enacted to bring risk to acceptable levels or ALARP (as low as reasonably practicable), and
- fit for purpose equipment.²²²

8.3 Community response

Whenever site safety fails, the impacts are felt throughout mining communities. Mayor Anne Baker of Isaac Regional Council advised the committee at a public hearing that:

When a miner dies or is injured, the impacts are felt far beyond the mine lease. There is a shock wave, which I have personally lived through, that ripples through our community, leaving lasting effects on the social fabric of this community.²²³

Isaac Regional Council submitted that coal mining industry safety practices present wider-reaching impacts for the local communities which service mine sites. The Council cites concerns that the Emergency Management Plan in place at mines in the Isaac Region, which is serviced by the Moranbah Hospital, are inadequate.

The likelihood of a High Potential incident taking place that Moranbah Hospital is not equipped or staffed to manage and therefore resulting in loss of human life, is one of great concern.²²⁴

When injuries occur at mine sites, there were conflicting submissions about the way that communities get notified of incidents at mines which might require use of community infrastructure such as hospitals. In the case of Moranbah, Isaac Regional Council advised the committee that site safety supervisors had the power to suspend mining activities when the hospital was not adequately staffed,

²²¹ Submission 8, p 3.

²²² Submission 10, p 10.

²²³ Public hearing transcript, Moranbah, 2 November 2022, p 1.

²²⁴ Submission 7, p 7.

however various coal mine operators with operations in the Moranbah region were unable to confirm this in respect of their mines.²²⁵

Committee comment

We support the conclusions by the Mine Managers Association of Australia regarding the areas that are required to enhance overall site safety at Queensland mine sites. We acknowledge the ongoing work that coal mine operators report they are doing with respect to enhanced personal and process safety, and overall site safety.

In reviewing the submissions and evidence we received during this inquiry, we have formed a view that the journey towards better safety at coal mine sites should be assisted by specific, targeted legislative enhancements such as those proposed in the CRIS, but we also acknowledge that too much regulation tips the scale back towards a proscriptive legislative framework, which evidence suggests results in a higher rate of worker fatality than risk-based frameworks. Only genuine tripartite participation in the Queensland coal mining safety and health framework will ensure the scales remains appropriately balanced. We single out the use of industry-wide Safety Resets, which involve coal mine operators, the union and the regulator working cheek-to-cheek on temperature checking safety, as a very effective tripartite collaboration with immediately obvious beneficial outcomes.

Recommendation 11

Conduct genuinely tripartite Safety Reset sessions for the Queensland coal mine industry at least biannually, and preferably annually.

²²⁵ BHP Group Ltd and BM Alliance Coal Operations Pty Ltd, Public hearing transcript, Brisbane, 28 November 2022, p 19, and Anglo American, Public hearing transcript, Brisbane, 28 November 2022, p 24.

Appendix A – Submitters

Sub #	Submitter
001	Robert Heron
002	Andrew Hopkins
003	Phil and Michelle Dodunski
004	Name withheld
005	Name withheld
006	<i>Unallocated submission number</i>
007	Isaac Regional Council
008	Andrew Iwers
009	Stuart Vaccaneo
010	Mine Managers Association of Australia Incorporated
011	Queensland Resources Council
012	Confidential
013	Scott Leggett
014	Mining and Energy Union Qld
015	Resources Safety and Health Qld
016	Idemitsu Australia Pty Ltd
017	BHP Group Limited and BM Alliance Coal Operations Pty Ltd
018	Peabody Energy Australia Pty Ltd
019	Anglo American
020	Kestrel Coal Resources
021	Phil Nobes
022	Cleo Gerdes
023	Glencore
024	Wade McGovern

Appendix B – Officials at public departmental briefing

Resources Safety and Health Queensland

- Peter Newman, Chief Inspector, Coal
- Robert Djukic, Chief Operating Officer

Appendix C – Witnesses at public hearings

Public hearing held on 2 November 2022 at Moranbah Community Workers Club

Isaac Regional Council

- Mayor Anne Baker

Individual

- Mr Scott Leggett

Public hearing held on 28 November 2022 at the Parliamentary Annexe Building, Brisbane

Queensland Resources Council

- Hon Ian Macfarlane, Chief Executive
- Ms Judith Bertram, Deputy Chief Executive and Policy Director Safety and Community
- Mr Paul Goldsborough, Health and Safety Policy Manager

Mining and Energy Union Queensland

- Mr Stephen Watts, Industry Safety and Health Representative
- Mr Jason Hill, Industry Safety and Health Representative
- Mr Stephen Woods, Industry Safety and Health Representative

BHP Group Limited and BM Alliance Coal Operations Pty Ltd

- Mr Ben Clarke, Mineral Australia Vice President of Health, Safety and Environment
- Mr Michael Thomas, General Manager and SSE

Anglo American

- Mrs Victoria Somlyay, Head of Corporate Relations
- Mr Marc Kirsten, Head of Safety and Health
- Mr Matt Cooper, Executive Head of UG Operations

Kestrel Coal Resources

- Mr Shane Hansen, Chief Executive Officer
- Mr Phillip Nobes, General Manager Operations

Mine Managers Association of Australia Incorporated

- Mr John Sleigh, Vice-President – Northern Region

Individual

- Mr Stuart Vaccaneo

Public hearing held on 10 January 2023 at the Parliamentary Annexe Building, Brisbane

Individual

- Mr Andrew Iwers

Appendix D – Recommendations made by the Queensland Coal Mining Board of Inquiry ²²⁶

Part 1 Report, November 2020

Rec no.	Made to	Recommendation
1	Industry	Mine operators and parent companies regard, and action, a reportable methane exceedance as having a potential consequence of level 4 or 5 under corporate incident classification criteria.
2	Industry	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.
3	RSHQ	RSHQ, in consultation with the Public Service Commission, undertakes a review of remuneration for inspectors: <ol style="list-style-type: none"> a. to ensure that such remuneration is structured to attract and retain suitably qualified and experienced persons for such positions; and b. to provide a financial incentive for inspectors to study to obtain a First-Class Certificate of Competency.
4	RSHQ	RSHQ continues to implement the three stage process for improvement in efficiency in the management of HPIs.
5	RSHQ	RSHQ continues to monitor and report the Serious Accident Frequency Rate and the HPI Frequency Rate.
6	RSHQ	RSHQ audits and reports on the proper identification and effective implementation of critical controls associated with the management of principal hazards. In particular, RSHQ focuses on the auditing of critical controls associated with the gas principal hazard management plan.
7	Industry	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.
8	Industry	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.
9	Industry	Mine operators and parent companies ensure that such methane exceedances are formally notified as soon as possible to senior executives of the parent company.
10	Industry	Mine operators and parent companies ensure adequate spare capacity in goaf drainage systems, above the predicted maximum methane emissions.
11	Industry	The industry and the QMRS consult to determine whether it is viable for the QMRS to provide self-escape training for all underground coal mine workers, as well as generic inductions, site-specific inductions and refresher training.
12	RSHQ	RSHQ takes steps to amend the Regulation to provide that the training scheme required by section 82(3) must cover the provisions of the Act and Regulation, including the safety and health obligations imposed by Part 3 of the Act.

²²⁶ Queensland Coal Mining Board of Inquiry, Report Part I, November 2020 and Report Part II, May 2021; table adapted from Submission 15, pp 9-13.

Rec no.	Made to	Recommendation
13	RSHQ	RSHQ takes steps to amend the Act to require that the person left in charge of an underground coal mine in the absence of the UMM must hold either a First or Second Class Certificate of Competency.
14	RSHQ	RSHQ takes steps to amend the Act to require that an SSE for an underground coal mine must be the holder of a First-Class Certificate of Competency.
15	RSHQ	RSHQ takes steps to amend the Act to require that a person appointed to act as the SSE for an underground coal mine, during an SSE's absence of more than 14 days, must be the holder of a First or Second-Class Certificate of Competency.
16	CMSHAC	The Coal Mining Safety and Health Advisory Committee (CMSHAC) includes the RIWHS601E competency (Establish and maintain the WHS management system) as a competency required to be held by an SSE.
17	RSHQ	RSHQ takes advice as required and, if necessary, takes steps to amend the Act to clearly reflect that a parent company holds obligations under section 39.
18	Industry	The industry adopts strategies and performance measures to address process safety and personal safety separately
19	RSHQ	RSHQ takes steps to amend the Act and Regulation to require a coal mine to develop a set of critical controls with performance criteria which must be incorporated into Principal Hazard Management Plans (PHMPs), and which require: <ol style="list-style-type: none"> a. the SSE to notify the Regulator in the event of a failure of the critical control to meet its performance criteria; b. the SSE to monitor the effectiveness of the critical controls, and report the results to the mine operator, on a monthly basis; and c. coal mine operators to audit critical controls as part of the audit prescribed by section 41(1)(f) of the Act.
20	RSHQ	RSHQ, in consultation with the industry, advise the Minister on proposed content for a recognised standard for the implementation of critical control management, based on the International Council on Mining and Metals (ICMM) Good Practice Guide and ICMM Implementation Guideline.
21	RSHQ	RSHQ audits the effectiveness and implementation of critical controls associated with a mine's PHMPs at regular intervals and publishes results of these audits in its Annual Safety Performance and Health Report.
22	CMSHAC	The CMSHAC works with registered training organisations to include CCM in the standard risk management training packages (particularly RIIRIS601E).
23	Industry	The industry gives lead safety indicators greater weight than lag safety indicators when measuring safety performance.
24	Industry	The industry gives lead safety indicators greater weight than lag safety indicators in the determination of executive bonuses
25	RSHQ	RSHQ takes advice as required, and if necessary, takes steps to amend Part 3A of the Act so that it reflects Parliament's intention with regard to: <ol style="list-style-type: none"> a. strengthening the safety culture in coal mining and ensuring consistency in how deaths of workers on work sites are treated; and b. who should be liable to prosecution.

Part 2 Report, May 2021

Rec no.	Made to	Recommendation
1	Anglo American (Grosvenor mine)	<p>In light of the Board’s finding that mining operations were repeatedly conducted in a manner whereby the gas emissions being generated by the rate of production were in excess of the capacity of the mine’s gas drainage system, Grosvenor mine management:</p> <ul style="list-style-type: none"> a. audits and reviews the effectiveness and implementation of the principal hazard management plans for gas management and methane drainage, to ensure that, in future, the risk to persons from coal mining operations is at an acceptable level. b. reviews the effectiveness of the mine’s operational practices and management systems, to ensure that, in future, production rates are adjusted to match a realistic PDCE and the actual peak specific gas emissions; and c. carries out detailed gas reservoir analysis to identify opportunities for gas pre-drainage, or other means of capture of gas before entering longwall workings, and specifically that this analysis include the FH, QA and QB seams.
2	Industry	<p>Prior to the commencement of each longwall panel, coal mines arrange a review, to be validated by a third-party independent engineering study:</p> <ul style="list-style-type: none"> a. to ensure that adequate gas pre-drainage has been implemented, taking into account a margin for error in any predictive modelling; and b. to ensure that adequate post-drainage capabilities are in place, taking into account a margin for error in any predictive modelling.
3	Industry	<p>In light of the evidence that gas emission modelling is inherently flawed, with a high margin of error, coal mines, at the time of undertaking second workings risk assessments:</p> <ul style="list-style-type: none"> a. Critically assess and scrutinise any gas emission modelling for an upcoming longwall panel. The assessment should include a review of the model’s predictive accuracy for previous longwalls; b. Take steps to satisfy themselves that sufficient pre-drainage has in fact been undertaken to the extent reasonably necessary to reduce gas emissions to a safe level; c. Ensure post-drainage systems are designed: <ul style="list-style-type: none"> i. with sufficient redundancy to cope with peak gas emissions, including a factor of safety in drainage capacity, and allowing for system failures; and ii. in such a way that the risk of spontaneous combustion is not increased by oxygen ingress to the goaf; d. Ensure ventilation systems are designed in such a way as to ensure they work in combination with the post-drainage system to dilute predicted peak gas emissions to levels that achieve an acceptable level of risk.
4	Industry	<p>Coal mines regularly assess production rates and adjust them as necessary to ensure they do not result in gas emissions exceeding the capacity of the gas drainage system.</p>
5	RSHQ	<p>Resources Safety & Health Queensland (RSHQ) reviews its risk profiling and response practices with a view to ensuring that it operates as a proactive regulator.</p>
6	RSHQ	<p>The Board repeats its recommendation made in the Part I Report, Chapter 6,</p>

Rec no.	Made to	Recommendation
		recommendation 19, that: RSHQ take steps to amend the <i>Coal Mining Safety and Health Act 1999 (Qld)</i> (the Act) and the <i>Coal Mining Safety and Health Regulation 2017 (Qld)</i> to require a coal mine to develop a set of critical controls with performance criteria which must be incorporated into Principal Hazard Management Plans, and which require: <ol style="list-style-type: none"> the Site Senior Executive (SSE) to notify the Regulator of a failure of a critical control to meet its performance criteria. the SSE to monitor the effectiveness of the critical controls, and report the results to the mine operator, on a monthly basis; and coal mine operators to audit critical controls as part of the audit prescribed by section 41(1)(f) of the Act.
7	Anglo American (Grosvenor mine)	Grosvenor develop a set of TARP triggers for spontaneous combustion in the active goaf with respect to the goaf stream.
8	Anglo American (Grosvenor mine)	Grosvenor review the TARPs for goaf wells and include a requirement for the taking of regular bag samples under 'Normal' TARP conditions.
9	Industry	Coal mines include the carbon monoxide (CO) reporting to the goaf wells with that measured in the longwall return when calculating the total CO Make for the active goaf.
10	RSHQ	Resources Safety & Health Queensland takes steps, through the consultative process provided by the Coal Mining Safety and Health Advisory Committee, to ensure that a Recognised standard based on best practice is developed for the monitoring and control of spontaneous combustion in underground coal mines.
11	Industry	Coal mines provide all workers who go underground with personal proximity devices that allow location tracking, and are active, for the entire time the workers are underground.
12	Industry	Coal mines implement a management practice for oxygen concentrations at goaf drainage wells to be maintained at no greater than 5%, and less if necessary, depending on site-specific conditions.
13	Industry	Coal mines conduct a thorough risk assessment for the use of polymeric chemicals, especially polyurethane resins, which includes a consideration of the risk of spontaneous combustion of coal being initiated by the product, before introduction and application at site.
14	Industry	The industry undertake research into polyurethane resins to determine the extent to which their use poses a risk of initiating spontaneous combustion of coal.
15	RSHQ	Resources Safety & Health Queensland takes steps to ensure that Recognised standard 16 is reviewed through the consultative process provided by the Coal Mining Safety and Health Advisory Committee, and that consideration is given to including a requirement within the standard that Site Senior Executives ensure a risk assessment is conducted in respect of the potential hazard arising from polymeric chemicals heating adjacent coal, resulting in spontaneous combustion.
16	Industry	Coal mines, in particular those working the GM seam, assess the risk of spontaneous combustion and consider designing and implementing proactive

Rec no.	Made to	Recommendation
		inertisation as a measure to deal with that risk.
17	Industry	Coal mines review the ventilation arrangements it has in place around the active goaf, with the view to identifying opportunities to reduce oxygen ingress to the goaf.
18	Industry	The industry undertake research, including field studies, into the simultaneous operation of goaf drainage systems and continuous inertisation.
19	Industry	Coal mines review their site induction procedures to ensure that all new workers at the mine, including labour hire workers and contractors, are fully informed about the fundamental importance of the reporting of safety concerns, including occupational health hazards, and assured that reprisals will not be taken in response. This will include ensuring that all new workers at the mine are aware of and understand the operation of sections 274, 275, 275AA and 275AB of the Act.
20	RSHQ	RSHQ takes steps, through the consultative process provided by CSMHAC, to include a component in the generic induction for coal mine workers (<i>Recognised standard 11: Training in Coal Mines</i>) on the roles of the Industry Safety and Health Representative and Site Safety and Health Representative, so as to promote awareness of the functions of each.
21	Industry	Mine operators review their contracts with labour hire agencies and include, where necessary, provision for a documented process by which performance management issues, and grievance issues, in respect of labour hire workers are addressed.
22	Industry	The industry reviews its production and safety bonus structures and make any necessary changes to ensure that those structures do not inadvertently discourage the reporting of safety incidents or injuries.
23	RSHQ	Similarly to the SSE's obligations under sections 106(1)(a), (b) and (c) of the Act, RSHQ takes steps to amend the Act to require the SSE at a mine to inform the management of a labour hire agency which has employees at the mine when the following events occur, as soon as practicable after the event comes to the SSE's knowledge: <ul style="list-style-type: none"> a. an injury or illness to an employee of the labour hire agency from coal mining operations that causes an absence from work of the person; b. a high potential incident happening at the coal mine; c. any proposed changes to the coal mine, or plant or substances used at the coal mine that affect, or may affect, the safety and health of persons at the mine.
24	RSHQ	RSHQ takes steps to amend the Act to require labour hire agencies to notify the Regulator of a serious accident, an HPI of a type prescribed under a regulation, or a death at a coal mine, involving their employees.
25	RSHQ	Without diminishing the burden, or extent, of obligations imposed on others under the Act, RSHQ takes steps to amend the Act to impose a safety and health obligation on labour hire agencies which supply workers to a mine, in similar terms to section 19 of the NSW Act.
26	CSMHAC	When submitting a panel of names of individuals experienced in coal mining operations as nominees for membership of CSMHAC under section 79 of the Act, organisations representing coal mine operators should ensure the panel includes representatives of labour hire agencies.

Rec no.	Made to	Recommendation
27	RSHQ	Consistently with Part 7 of the MQSHA and Part 5 of the WHS Act, RSHQ takes steps to amend the Act to enable the formation of safety committees upon request by an SSHR or when directed by the Chief Inspector.
28	CMSHAC	As part of carrying out its functions under section 76A of the Act, CMSHAC considers including within its 5-year Strategic Plan activities that will facilitate improvements in the reporting culture in Queensland coal mines.
29	RSHQ	RSHQ takes advice, as required, and if necessary, takes steps to amend section 275AA of the Act to clarify the application of the reprisal offence, with a view to strengthening protections for workers. For example, this may involve including a definition of 'detriment'.
30	RSHQ	In relation to reprisal complaints, the Inspectorate undertakes prompt and thorough investigations, and provides appropriate feedback to complainants during the investigation and prosecution process.
31	RSHQ	The current model of appointment of ISHRs be retained.
32	RSHQ	RSHQ takes steps to amend the <i>Coal Mining Safety and Health Regulation 2017 (Qld)</i> , schedule 1B 'Site safety and health representative election process', clause 13(6), to require the returning officer for a ballot in respect of the election of an SSHR to give notice of the result of the ballot to the ISHRs.
33	Industry	The ISHRs take a more proactive role in cultivating mutually beneficial relationships with SSHRs.
34	RSHQ	RSHQ takes steps to amend section 119(1)(c) of the Act to permit copying of all documents amenable to examination under that provision.
35	RSHQ	RSHQ takes steps, through the consultative process provided by the Coal Mining Safety and Health Advisory Committee, to include a component on the roles of SSHRs and ISHRs in the <i>Recognised standard 11: Training in coal mines</i> , so as to promote awareness of the availability of both functions.
36	RSHQ	The Inspectorate reinstates the practice of sending MREs to ISHRs.
37	Industry	The Construction, Forestry, Maritime, Mining and Energy Union and management at coal mines encourage coal mine workers to nominate for election as an SSHR.
38	RSHQ	Consistently with Recommendation 35, Resources Safety & Health Queensland (RSHQ) takes steps, through the consultative process provided by the Coal Mining Safety and Health Advisory Committee to include information about the importance and nature of the role of SSHRs in the generic induction for coal mine workers, <i>Recognised standard 11: Training in coal mines</i> .
39	Industry	Coal mines use their work order system to schedule and record the completion of an SSHR inspection to assist with incorporating the inspection activity into the mine's weekly plan, and to demonstrate management support for the SSHR function.
40	Industry	Site Senior Executives consider whether it would be advantageous to make the SSHR role at their mine a full-time position.

Appendix E – Industry response to recommendations ²²⁷

The table below provides a summary of progress of the responses from all underground coal mines to the Board of Inquiry’s recommendations, as at January 2023. The responses indicate whether the mines accept the recommendations, rather than full implementation.

No.	Description	Implementing recommendation		Not Applicable **	Comments
		Yes	No		
Part I report					
1	Mine operators and parent companies regard, and action, a reportable methane exceedance as having a potential consequence of level 4 or 5 under corporate incident classification criteria.	13			
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.	13			
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.	13			
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.	13			
9	Mine operators and parent companies ensure that such methane exceedances are formally notified as soon as	13			

²²⁷ Resources Safety and Health Queensland, correspondence, 13 January 2023, Attachment 2

	possible to senior executives of the parent company.				
10	Mine operators and parent companies ensure adequate spare capacity in goaf drainage systems, above the predicted maximum methane emissions.	7		6	6 operations are either in Care and Maintenance or do not have longwall operations
11	The industry and the QMRS consult to determine whether it is viable for the QMRS to provide self-escape training for all underground coal mine workers, as well as generic inductions, site-specific inductions, and refresher training.	3	10		It is understood some mines deliver this training themselves
18	The industry adopts strategies and performance measures to address process safety and personal safety separately.	13			
23	The industry gives lead safety indicators greater weight than lag safety indicators when measuring safety performance.	13			
24	The industry gives lead safety indicators greater weight than lag safety indicators in the determination of executive bonuses.	13			
Part 2 report					
2	<p>Prior to the commencement of each longwall panel, coal mines arrange a review, to be validated by a third party independent engineering study:</p> <ul style="list-style-type: none"> a. to ensure that adequate gas pre-drainage has been implemented, taking into account a margin for error in any predictive modelling; and b. to ensure that adequate post-drainage capabilities are in place, taking into account a margin for error in any predictive modelling. 	7		6	Not applicable to continuous miner operations

<p>3</p>	<p>In light of the evidence that gas emission modelling is inherently flawed, with a high margin of error, coal mines, at the time of undertaking second workings risk assessments:</p> <ul style="list-style-type: none"> a. Critically assess and scrutinise any gas emission modelling for an upcoming longwall panel. The assessment should include a review of the model's predictive accuracy for previous longwalls; b. Take steps to satisfy themselves that sufficient pre-drainage has in fact been undertaken to the extent reasonably necessary to reduce gas emissions to a safe level; c. Ensure post-drainage systems are designed: <ul style="list-style-type: none"> i. with sufficient redundancy to cope with peak gas emissions, including a factor of safety in drainage capacity, and allowing for system failures; and ii. in such a way that the risk of spontaneous combustion is not increased by oxygen ingress to the goaf; d. Ensure ventilation systems are designed in such a way as to ensure they work in combination with the post-drainage system to dilute predicted peak gas emissions to levels that achieve an acceptable level of risk 	<p>7</p>		<p>6</p>	
<p>4</p>	<p>Coal mines regularly assess production rates and adjust them as necessary to ensure they do not result in gas emissions exceeding the capacity of the gas drainage system.</p>	<p>7</p>		<p>6</p>	<p>Not applicable to continuous miner operations</p>
	<p>Coal mines include the carbon monoxide (CO) reporting to the</p>				<p>While some mines' systems trigger CO</p>

9	goaf wells with that measured in the longwall return when calculating the total CO Make for the active goaf.	4	2	7	make underground when detected in the borehole, industry queries whether it is a relevant indicator due to the low volume at the borehole
11	Coal mines provide all workers who go underground with personal proximity devices that allow location tracking, and are active, for the entire time the workers are underground	12		1	
12	Coal mines implement a management practice for oxygen concentrations at goaf drainage wells to be maintained at no greater than 5%, and less if necessary, depending on site-specific conditions.	9		4	
13	Coal mines conduct a thorough risk assessment for the use of polymeric chemicals, especially polyurethane resins, which includes a consideration of the risk of spontaneous combustion of coal being initiated by the product, before introduction and application at site.	13			
14	The industry undertake research into polyurethane resins to determine the extent to which their use poses a risk of initiating spontaneous combustion of coal.	13			
16	Coal mines, in particular those working the GM seam, assess the risk of spontaneous combustion and consider designing and implementing proactive inertisation as a measure to deal with that risk.	9		3	
17	Coal mines review the ventilation arrangements it has in place around the active goaf, with the view to identifying opportunities to reduce oxygen ingress to the goaf.	9		4	

18	The industry undertake research, including field studies, into the simultaneous operation of goaf drainage systems and continuous inertisation.	9		4	
19	Coal mines review their site induction procedures to ensure that all new workers at the mine, including labour hire workers and contractors, are fully informed about the fundamental importance of the reporting of safety concerns, including occupational health hazards, and assured that reprisals will not be taken in response. This will include ensuring that all new workers at the mine are aware of and understand the operation of sections 274, 275, 275AA and 275AB of the Act.	13			
21	Mine operators review their contracts with labour hire agencies and include, where necessary, provision for a documented process by which performance management issues, and grievance issues, in respect of labour hire workers are addressed.	13			
22	The industry reviews its production and safety bonus structures and make any necessary changes to ensure that those structures do not inadvertently discourage the reporting of safety incidents or injuries.	11		2	No bonus structure in place in the N/A mines
26	When submitting a panel of names of individuals experienced in coal mining operations as nominees for membership of CSMHAC under section 79 of the Act, organisations representing coal mine operators should ensure the panel includes representatives of labour hire agencies.	9		4	Implemented through QRC nomination process
	Coal mines use their work order system to schedule and record				Industry had varying views on

39	the completion of an SSHR inspection to assist with incorporating the inspection activity into the mine’s weekly plan, and to demonstrate management support for the SSHR function.	9	4		this recommendation, some querying whether it would have unintended consequences by limiting the occasions when an SSHR can undertake inspections to when they are scheduled, rather than when they are required.
40	Site Senior Executives consider whether it would be advantageous to make the SSHR role at their mine a full-time position.	6	7		Some saw this impacting the independence of the role
1	<p>In light of the Board’s finding that mining operations were repeatedly conducted in a manner whereby the gas emissions being generated by the rate of production were in excess of the capacity of the mine’s gas drainage system, Grosvenor mine management:</p> <ul style="list-style-type: none"> a. audits and reviews the effectiveness and implementation of the principal hazard management plans for gas management and methane drainage, to ensure that, in future, the risk to persons from coal mining operations is at an acceptable level; b. reviews the effectiveness of the mine’s operational practices and management systems, to ensure that, in future, production rates are adjusted to match a realistic PDCE and the actual peak specific gas emissions; and c. carries out detailed gas reservoir analysis to identify opportunities for gas pre-drainage, or other means of capture of gas before entering longwall workings, and specifically that this analysis include the FH, QA and QB seams. 	6		7	Recommendation directed specifically at Grosvenor mine but applicable to some other underground mines

7	Grosvenor develop a set of TARP triggers for spontaneous combustion in the active goaf with respect to the goaf stream.	6		7	Recommendation directed specifically at Grosvenor mine but applicable to some other underground mines
8	Grosvenor review the TARPs for goaf wells and include a requirement for the taking of regular bag samples under 'Normal' TARP conditions.	6		7	Recommendation directed specifically at Grosvenor mine but applicable to some other underground mines

Appendix F – Mining and Energy Union mine safety survey results

Safety Survey

Queensland coal mineworkers' safety survey results

29 July 2019

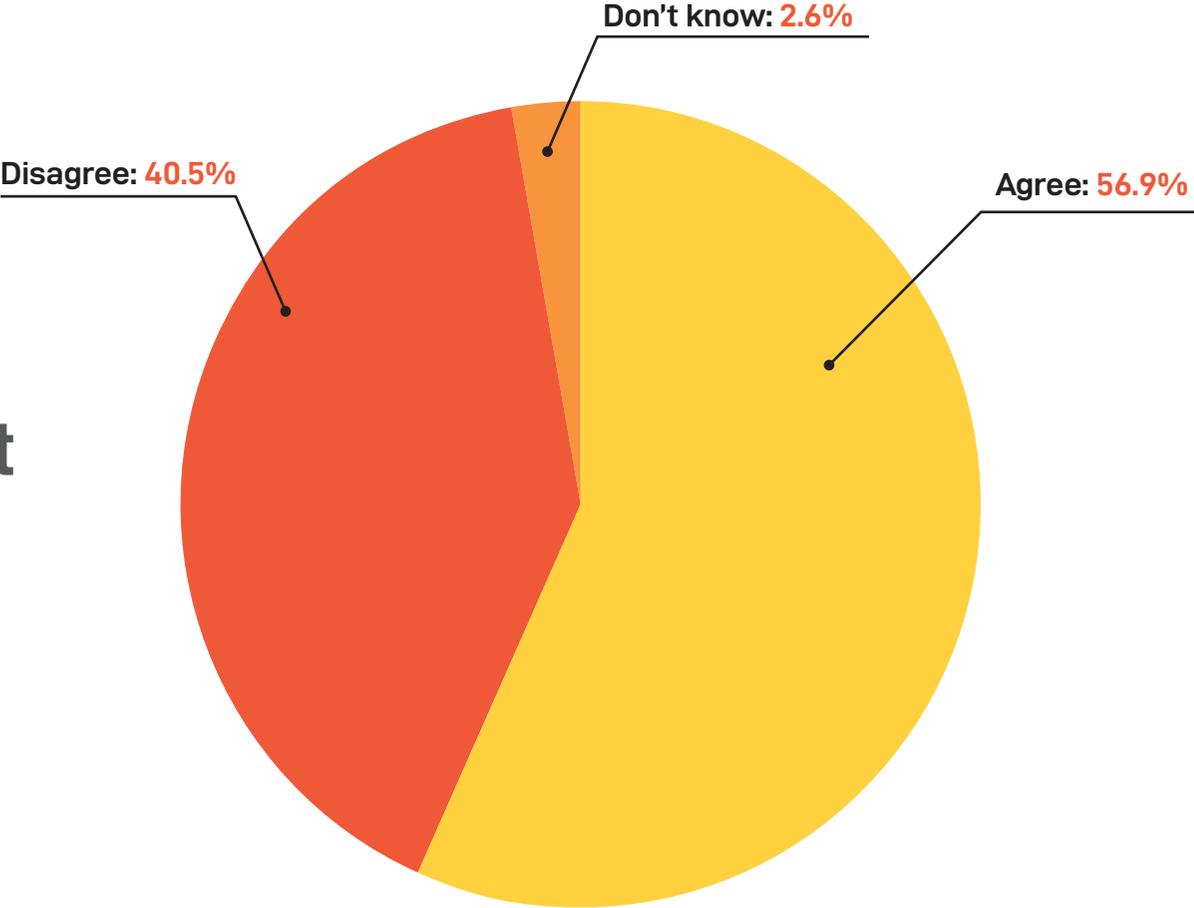


CFMEU
Mining & Energy

We recently surveyed over 1,000 Queensland coal mineworkers. Here's what they said:

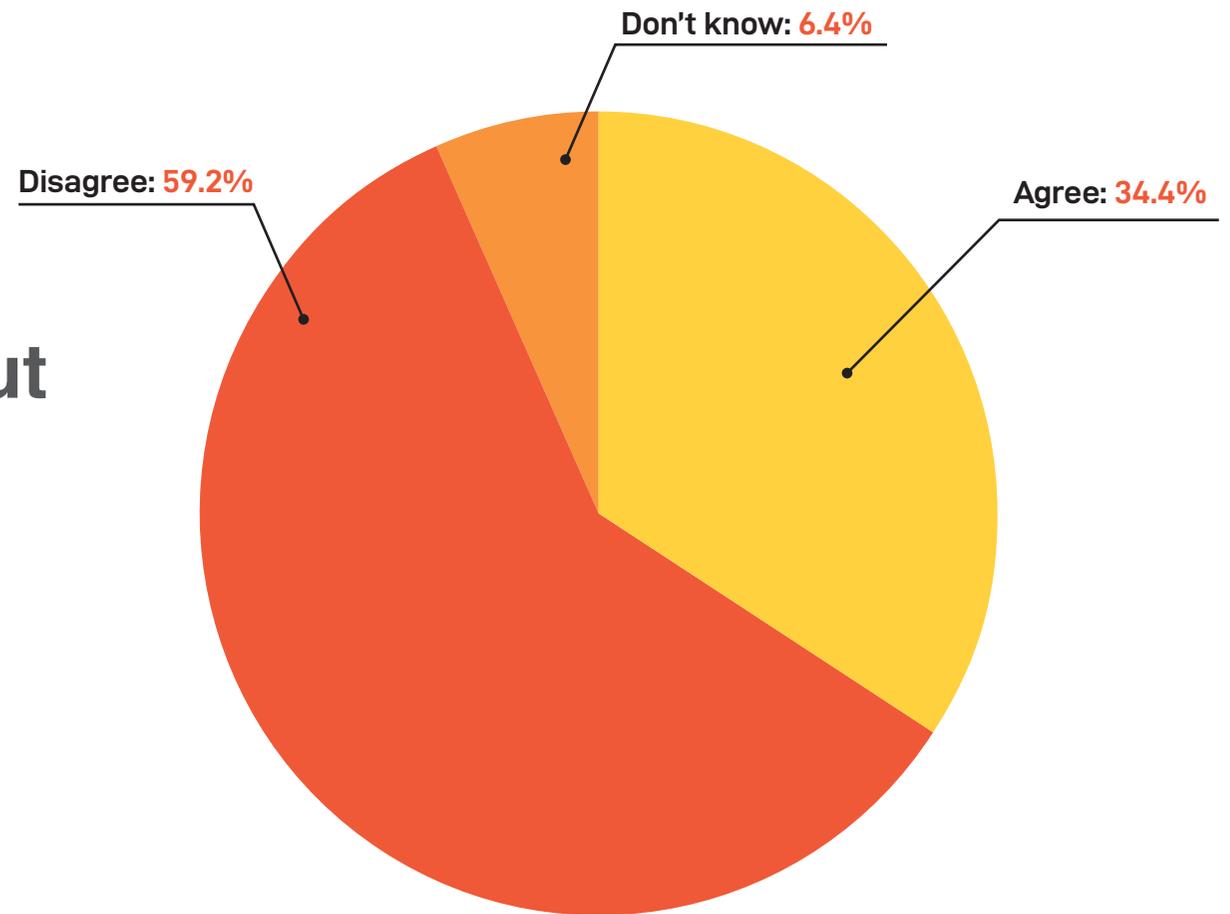
Over **four in ten** coal mineworkers fear reprisals if they speak up about safety

Q: I can speak up about safety without fear of reprisal:



It's worse for casuals: **Six in 10 casual mineworkers** fear reprisals if they speak up about safety

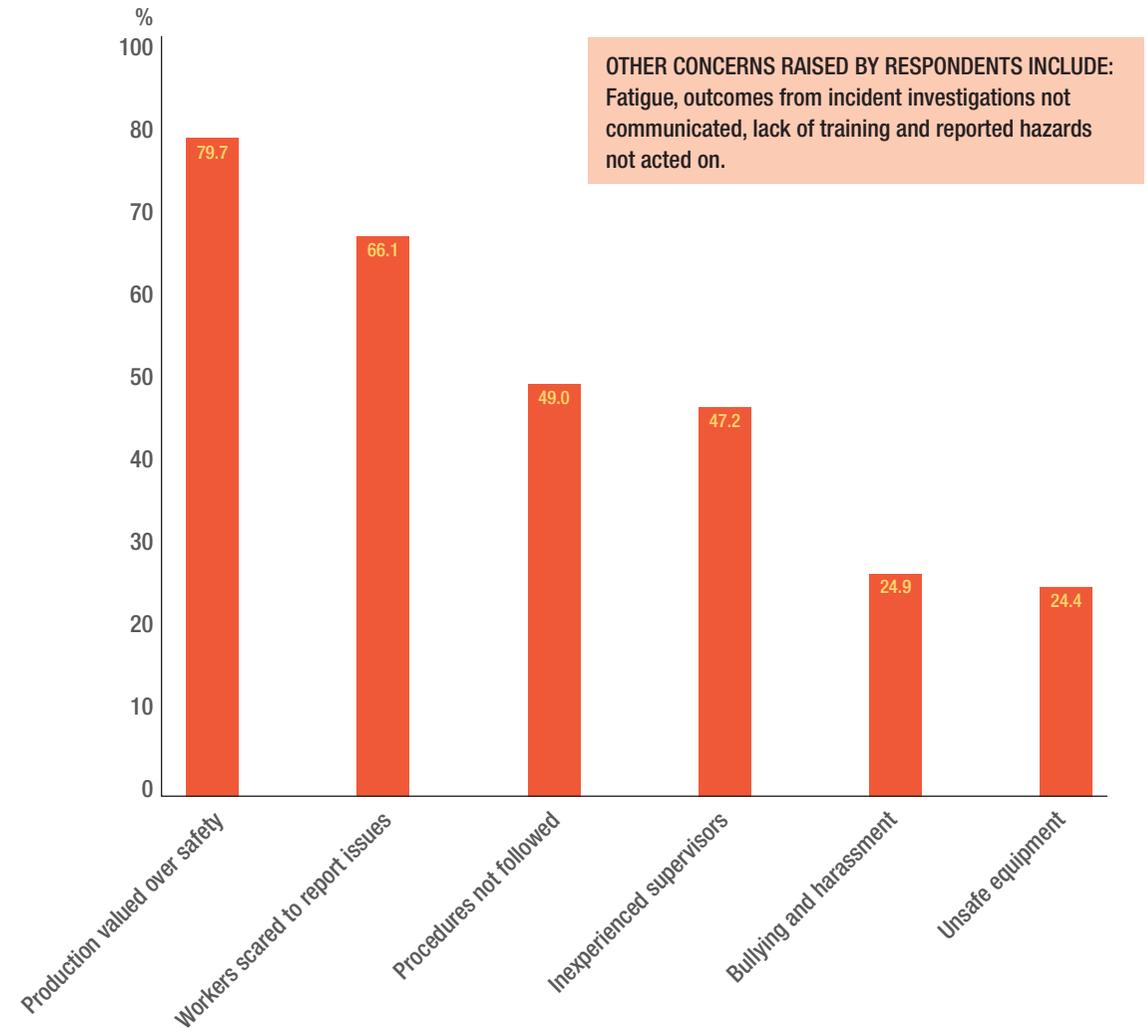
Q: I can speak up about safety without fear of reprisal (casual workers only):



Companies valuing production above safety is workers' biggest safety concern

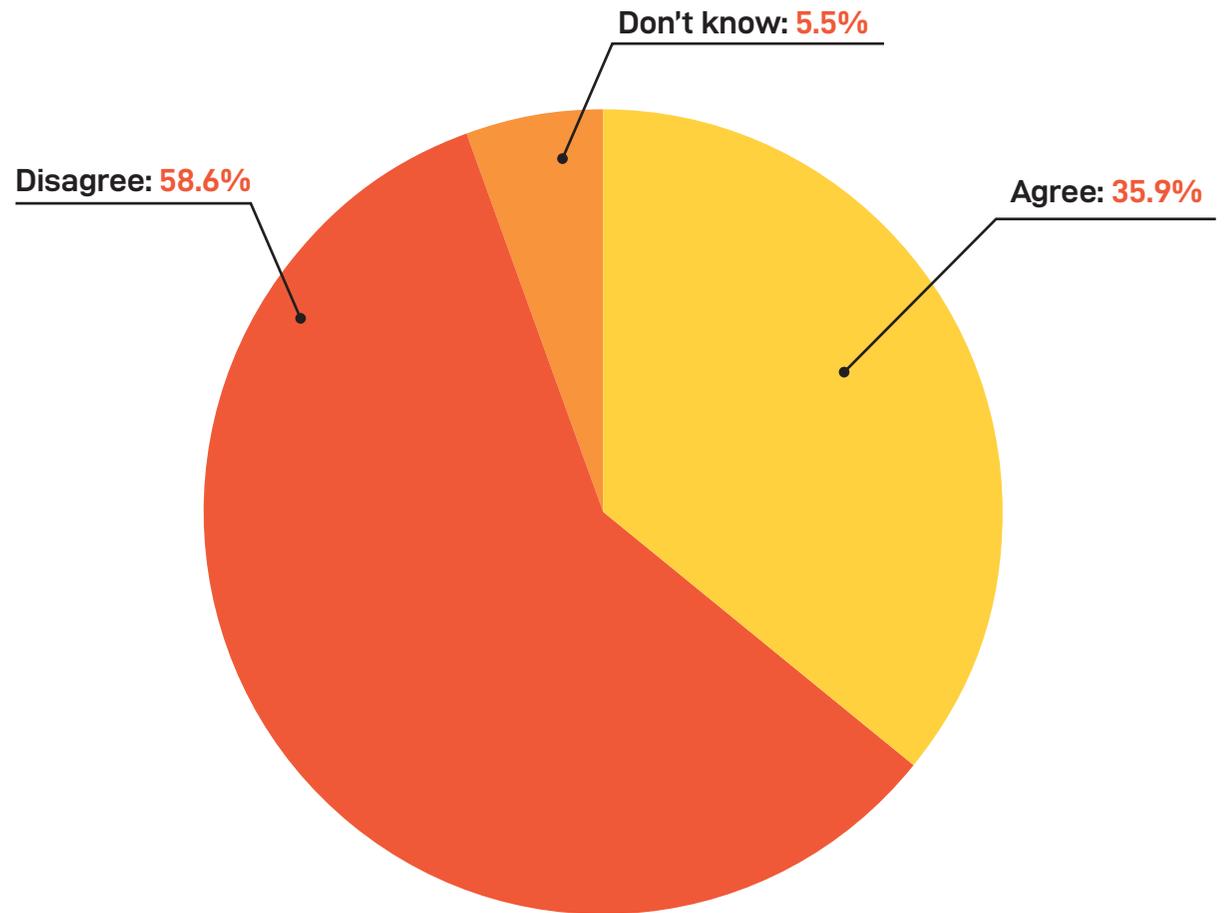
Q: What are your biggest safety concerns*?

*respondents selected their top 3 safety concerns



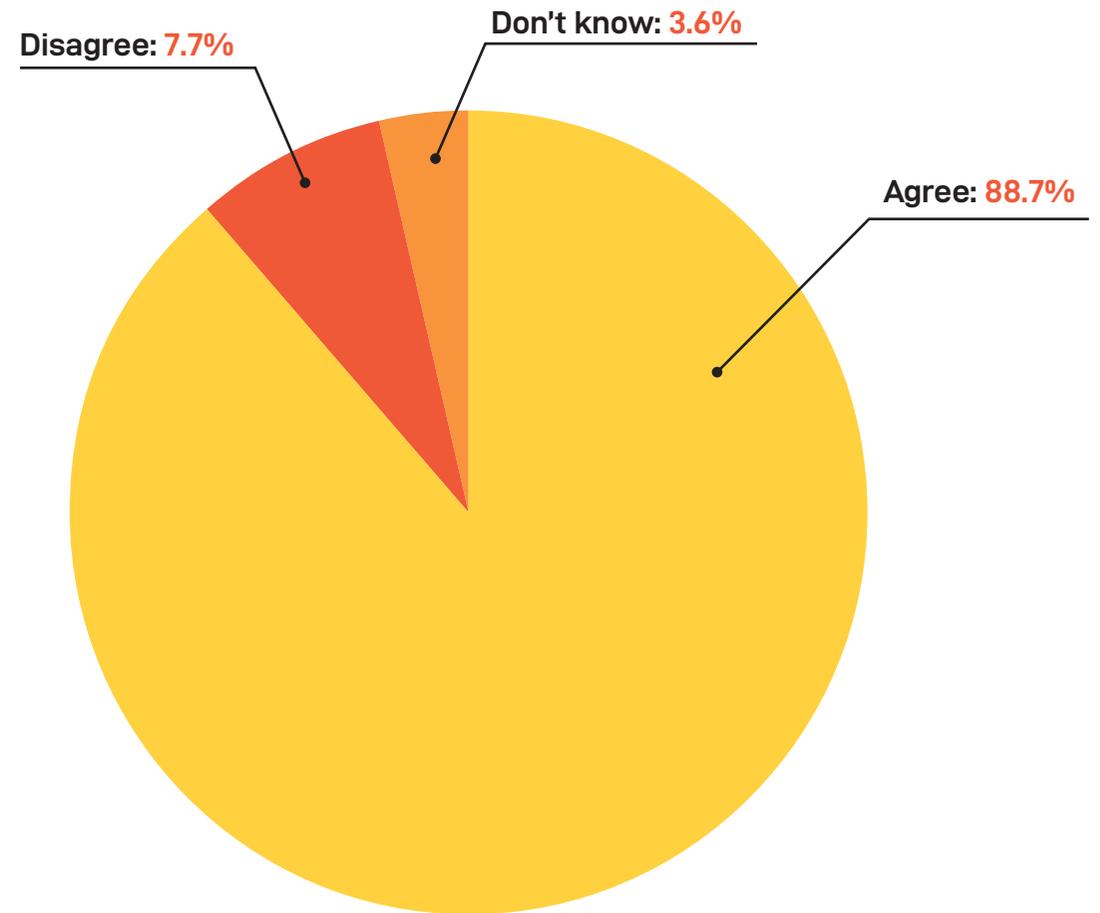
Most mineworkers **don't believe** site managers put safety first

**Q: Safety is the top
priority of site
managers**



Nearly everyone agrees lack of job security affects safety

Q: Casualisation of jobs at my work site affects safety



Workers have clear ideas about how coal mine safety can be improved

Q: What are the most important things to improve mine safety?

Key themes from 929 responses to this question are:

The need for more permanent jobs and job security

Workers' safety concerns to be taken seriously

Investment in proper training

Mine management to be held to account through strong laws and regulation

Put safety before production and KPIs.

What workers say...

“Bring back permanent workforce so they can have some ownership.”

“We need a better reporting culture and no fear of being in trouble for reporting issues to co-ordinators and superintendent thought the safety and health management system. And taking time to fix these issues.”

“Management to stop pushing supervisors for production targets and not fixing roads because it holds up production.”

“Proper training and reporting in all areas across site and stop the watering down of procedures in favour of production.”

“Take foot off production and spend more time with quality training.”

“Unsafe equipment to be fixed, not kept running.”

“Stop the feeling of can't stop for safety, keep going or it will be used against you, made to feel like you will lose your job if you speak up.”

“Changing the focus from targets to safety.”

“Permanent jobs! Labour hire do not speak up for fear of reprisals.”

“Say something today, gone tomorrow.”

“Get supervisors to listen to the operators about how the work should be carried out safely, operators have years of experience behind them.”

“Give permanent shirts so people are not as stressed with the uncertainty of being sacked. They will have their minds on task, therefore improving safety and people won't be showing up to work sick, tired and unfit for work just so they don't miss a day's pay.”

“More intense training for new to the industry people and adhering to work practices and procedures.”

“Every worker on site to be able to stop the job for safety regardless of what shirt they are wearing.”

“Legislation needs to be enforced. Companies know nothing happens and has no respect or understanding of the legislation. People are frightened to speak up. People have no understanding of risk management or legislation.”

“Fix machines properly instead of patch up jobs to get them out of the workshop quickly.”

Who took part in this survey?

This survey was distributed electronically by CFMEU Mining and Energy Queensland District on 16 July 2019 and was completed mostly by Union members. The sample has a good representation of open cut and underground coal miners. It has a lower proportion of casual employees than exists in the industry, reflecting our membership.

Total number of survey participants: 1010

Underground: 21.8%

Open cut: 78.2%

Permanent: 84.9%

Casual: 12.4%

Fixed term: 2.7%

Union member: 92.9%

Non-union member: 7.1%

Thanks to all coal mineworkers who shared their views.

Appendix G –Photograph exhibit of one Queensland coal mine’s bonus calculations for workers ²²⁸

[OFFICIAL]

Mine Incentive Scheme – Weekending 30 October 2022

COMPONENT	KEY PERFORMANCE INDICATOR (KPI)	KPI CRITERIA		
1. Safety	Zero Harm	Zero Total Recordable Cases (TRCs) resulting from an intentional behaviour.		\$100
	Compliance	Nil deliberate or careless breaches of Golden Rules.		\$50
2. Planned Work		CM006	Mains @ \$2.20 per meter after 52m	\$140.58
		CM805	Mains @ \$2.20 per meter after 52m	\$0
	Planned Metres	CM007	Super Panel @ \$2.20 per meter after 125m	\$43.56
		CM009		
	LW	LW Panel @ \$4.40 per meter after 50m	\$108	
3. Effective and Efficient	Efficient	No deduction occurred due to rework.		\$0
	Housekeeping	Electrical standards in both Development panels as per shift engineer audit and HPI with cable damage in MG902		-\$50
TOTAL INCENTIVE SCHEME PAYABLE				\$391.94

²²⁸ Supplied by Mr Scott Leggett, public hearing, Moranbah, 2 November 2022.

Appendix H – Abbreviations

ALARP	as low as reasonably practicable
BHP/ BMA	BHP Group Limited and BM Alliance Coal Operations Pty Ltd
BoE	Board of Examiners
BOI	Queensland Coal Mining Board of Inquiry
CMSH Act	<i>Coal Mining Safety and Health Act 1999</i>
CMSHAC	Coal Mining Safety and Health Advisory Committee
CMO	coal mining operator
CMW	coal mine worker
CO	carbon monoxide
CRIS	Consultation Regulatory Impact Statement
HPIs	high potential incidents
HPIFR	High potential incident frequency rate
HRO	High Reliability Organisation
ISHRs	industry safety and health representatives
LTI	Lost time incident
LTIFR	Lost time incident frequency rate
MEU	Mining and Energy Union
MMAA	Mine Managers Association of Australia
NRI	non-reportable incident
OCE	open-cut examiner
PPE	personal protection equipment
QRC	Queensland Resources Council
RSHQ	Resources Safety and Health Queensland
SHMS	safety and health management system
SOP	standard operating procedures
SSEs	senior site executives
SSHC	Site safety and health committee
SSHRs	site safety and health representatives
SSMS	site safety management systems
TRIFR	total recordable injury frequency rate
UMM	Underground mine manager

Statement of Reservation

TRANSPORT AND RESOURCES COMMITTEE
INQUIRY INTO COAL MINING INDUSTRY SAFETY
STATEMENT OF RESERVATION

Queensland's coal industry remains one of this state's most vital – not only to the state but to our regional communities. The very nature of the industry means that those involved in its operation and regulation assume significant, critical responsibilities.

Importantly, every worker deserves to come home in one piece at the end of their shift. This fundamental belief that we all hold is why the non-government members of this committee supported the basis of this inquiry, and the intent of this committee report.

Coal miner operators require an appropriate regulatory environment to create employment and support high paying jobs, families and regional communities, while allowing them to remain profitable.

This is also a fundamental issue that needs to be considered when it comes to the implementation of coal mine safety legislation and regulation. The wrong approach may result in no incidents and fatalities occurring, but also create a state with no coal mine workers, no coal mine jobs, and no industry.

Primary Industry in Queensland often leads the world with best practice by almost every metric, whether it be environmental, economic, utilization of modern technologies, or work standards. When it comes to coal mine safety, when measured by loss of life and other incidents, it is clear that many improvements can be made.

Non-government members hold concerns about the Government seeking to tax coal mining companies even more, to increase resourcing for Resources Safety and Health Queensland (RSHQ) for compliance and enforcement reasons.

The Queensland Government was reaping record coal royalties even prior to the increases this financial year, which placed our state as the most expensive royalty regime in the world for our job-creating coal mining industry.

Recommendation 6, as written only mentions compliance and enforcement programs. This implies that regulation and legislation is currently adequate to address safety concerns. It omits the need for RSHQ to be proactive in working with industry to improve safety procedures and culture, by sharing learnings from incidents and near misses, or new technologies and practices that may be applicable locally.

We have further concerns with the vague approach from the government in seeking to determine whether the Board of Inquiry (BOI) recommendations have been implemented by industry. This is a backwards way of improving mine safety.

The government simply should not present recommendations and then review whether industry has complied with such recommendations. If the Government's view is that these recommendations must be implemented, then it should be the relevant Minister's responsibility to take the lead and issue a direction, whether legislative or regulatory, that these must be followed.

To date, the minister has not publicly directly issued instructions to industry to implement these recommendations highlighting a lack of leadership.

That said, any direction or instruction from the minister must be made in acknowledgement of the geological complexities of each individual coal mine.

During the course of the inquiry, it was noted that what works well at one mine may not work at another. This is where RSHQ needs to be more proactive with industry, in working with their on-site expertise to ensure best practice is being applied for the conditions of each mine.

Further, RSHQ inspections, unannounced or otherwise, need to be conducted in a manner that, over time, are representative of the industry across all of Queensland.

This inquiry very much focused on the industry's response but we note that thirty of the BOI recommendations were directed at RSHQ. RSHQ said in their opening statement that they have only implemented five of these. While they stated the rest are underway, it once again underlines that the minister is ineffective and fails to provide leadership at a time when the industry clearly needs strong support and capable hands at the top.

A critical point is that the minister should not be taking a heavy hand to industry when he himself is well behind on the implementation of these recommendations.

It is the view of non-government members that the minister needs to outline a clear timeline of legislative changes, along with the deadline for RSHQ to complete their implementation of BOI recommendations. This will provide all stakeholders with the ability to plan for legislative change, as well as set a standard as to the minister's expectations.

It is critical that all elements of the industry are involved in improving mine safety. We support all tripartite efforts to improve safety, and believe tripartite working groups, when run correctly, are the most effective means of improving safety.

Two other practical points need to be made.

Firstly, on the issue of mine safety it was noted in submissions that safety bonuses are not necessarily effective at achieving better outcomes. Metrics for safety bonuses are clearly complicated and may incentivise companies and employees to downgrade, or not report incidents, as was heard in one of the public hearings.

Secondly, it is the opinion of non-government members that an industry wide approach to safety bonuses and metrics may not be effective. This approach may add to the perception that safety and paperwork go hand in hand, and that if the paperwork is done, the job must be safe.

It is incredibly important that safety is considered for the different conditions of each site, including personnel experience, shifts, work conducted and natural hazards. It is also important to note that some coal mines have been operating for very long periods of time, and others are relatively new. This adds to the need for site-by-site consideration, due to different mining methods, technology, institutional knowledge, and machinery.

Safety cannot be addressed by any singular approach and requires all stakeholders to be proactively working together to have a safe work culture.

We encourage and support continuing efforts to achieve zero harm in the coal mining industry and believe this is a goal that should be strived for, as every person deserves to return home at the end of their shift.



Lachlan Millar MP
Member for Gregory
Deputy Chair



Bryson Head MP
Member for Callide



Trevor Watts MP
Member for Toowoomba North

14 February 2023