



Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement

Consultation Regulatory Impact Statement

2022

Prepared by: Resources Safety and Health Queensland

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Acronyms and glossary

Acronym/term	Description
BoE	Refers to the Board of Examiners established under the CMSHA, section 184
Bol	Queensland Coal Mining Board of Inquiry
Bol Report	Refers collectively to the Queensland Coal Mining Board of Inquiry reports delivered in two parts (Part I provided on 30 November 2020 and Part II provided on 31 May 2021)
CEO	Chief Executive Officer of RSHQ
CPD	Continuing professional development
CMSHA	<i>Coal Mining Safety and Health Act 1999</i>
CMSHR	Coal Mining Safety and Health Regulation 2017
CRIS	Consultation Regulatory Impact Statement
CCM	Critical control management
DNRME	This refers to the former Department of Natural Resources, Mines and Energy; and any predecessors as a result of machinery of government changes
DoR	Department of Resources
Directive/Directives	Refers collectively to directives, remedial action notices and compliance directions under the Resources Safety Acts
Explosives Act	<i>Explosives Act 1999</i>
GDAAs/GDAAs	Gas device approval authority/gas device approval authorities
HPI/HPIs	High potential incident/high potential incidents
HR Act	<i>Human Rights Act 2019</i>
HRO/HROs/HRO theory	High Reliability Organisation/High Reliability Organisations/High Reliability Organisational theory
LTI/LTIs/LTIFR	Lost time injury/lost time injuries/lost time injury frequency rate
Mining Safety Acts	This refers to both the CMSHA and the MQSHA
Mining Safety laws	Refers collectively to the CMSHA, the CMSHR, the MQSHA and the MQSHR
Minister	Refers, in the context of the Resources Safety Acts, to the Minister for Resources
MQSHA	<i>Mining and Quarrying Safety and Health Act 1999</i>
MQSHR	Mining and Quarrying Safety and Health Regulation 2017
PG Act	<i>Petroleum and Gas (Production and Safety) Act 2004</i>
PG Reg	Petroleum and Gas (Safety) Regulation 2018
Resources Safety Acts	Refers collectively to the CMSHA, the Explosives Act, the MQSHA and the PG Act; and where the context permits, includes the RSHQ Act
ROC/ROCs	Remote operating centre/Remote operating centres
RSHQ/the regulator	Resources Safety and Health Queensland
RSHQ Act	<i>Resources Safety and Health Queensland Act 2020</i>

SHMS	Safety and health management system
SSE/SSEs	Site senior executive/site senior executives
SSHC/SSHCs	Site safety and health committee/site safety and health committees
SSHR/SSHRs	Site safety health representative/site safety health representatives
UMM/UMMs	Underground mine manager/underground mine managers
WHS	Work health and safety
WHSA	Refers generally to the Queensland <i>Work Health and Safety Act 2011</i> unless otherwise stated



Executive summary

The Queensland Government is committed to achieving a strong resources sector. Resources industries – mining, quarrying, explosives and petroleum and gas – are key drivers of the Queensland economy, creating jobs and delivering a range of broader benefits for the State.

Since 2000 there have been 52 fatalities in the mining and quarrying industry alone. If we maintain the status quo, history indicates that there will likely be in the order of 12 fatalities over any five-year period. This is unacceptable. Improving the sector's safety and health performance to reduce the occurrence of fatalities and serious accidents is a Queensland Government priority.

A changed approach and adjustments to the safety framework for the resources sector is required to improve the safety and health of workers. Independent reviews in relation to safety and health in the resources sector have been undertaken including:

- a review of all fatal accidents in Queensland mines and quarries from 2000 to 2019 by forensic structural engineer Dr Sean Brady (Brady Review)
- a Board of Inquiry into coal mining safety incidents as a result of a serious accident at Grosvenor mine where five coal mine workers were seriously injured, along with 40 methane exceedances at Grosvenor and other mines.

The Brady Review found that a large number of the fatalities during the review period involved inadequate training of workers; controls meant to prevent harm were ineffective, unenforced or absent with no, or inadequate, supervision. Dr Brady 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. Key recommendations of the Brady review included:

- that a change in approach is required to how industry identifies and controls hazards, as well as how it recognises when these controls are eroding or ineffective.
- that the principles of High Reliability Organisation theory (HRO theory) should be adopted by the resources sector. This involves organisations focusing on identifying incidents that are precursors to larger fatalities and then using this information to identify and act on existing hazards to remove them.

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.

The Government has developed a comprehensive preventative and proactive package of regulatory safety reforms for the Resources Safety Acts¹ to reduce the rates of serious accidents and fatalities and support the Queensland resources sector in implementing approaches consistent with HRO theory. These include responding to findings of independent reviews. This package of reforms is detailed in Table 3 includes legislative amendments designed to:

- Facilitate the growth in HRO behaviours
- Modernise regulatory enforcement powers
- Implement a more contemporary legislative framework
- Ensure consistency across the Resources Safety Acts.

Two alternative proposals have been developed for comparison and to facilitate discussion. One of these options proposes continuing with the existing regulatory framework and, whilst this option is cost neutral, it will not lead to any further safety and health improvements or to a reduction of fatalities and incidents.

The other option proposes that the regulator conducts a broad educational program focusing on HRO principles and practices. Without legislative changes to support this approach, this option alone seems unlikely to achieve the objectives of government action.

This Consultation Regulatory Impact Statement has been developed to allow these options to be critically assessed via public consultation and public submissions are encouraged. The Queensland Government will consider the impact of the proposals based on this feedback before any amendments to legislation are made. A transitional phase for industry to adjust to relevant changes will also be considered.

¹ *Coal Mining Safety and Health Act 1999 (CMSHA), the Mining and Quarrying Safety and Health Act 1999 (MQSHA), the Explosives Act 1999 (Explosives Act) and the safety related aspects of the Petroleum and Gas (Production and Safety) Act 2004 (PG Act).*

Need for a Consultation Regulatory Impact Statement

A Consultation Regulatory Impact Statement (CRIS) is a critical part of the process of developing regulatory proposals. It critically assesses the impacts of proposed options and is designed to obtain feedback, through a public consultation process, to provide government with information about the expected impacts of a range of policy options to address a particular issue.

The CRIS identifies that government's objective is to support the Queensland resources industry to protect workers through implementation of appropriate reforms to reduce the rates of serious accidents and fatalities.

The CRIS assesses the impacts of the options, compared to the base case of maintaining the status quo. It identifies where the impacts of legislation changes may have a cost or benefit on the community, industry and government.

The CRIS seeks to determine a preferred course of action, taking into account the costs and benefits of each option.

How to make a submission

Feedback is invited on the recommended option - the package of preventive and proactive regulatory reforms for the Resources Safety Acts as well as in relation to the specific questions posed throughout the CRIS. Your feedback will be accepted until 5pm on 21 November 2022. Submissions can be made via the Get Involved website available online at <https://www.getinvolved.qld.gov.au/gi/consultation/9303/view.html>

The CRIS will be open for public consultation for a period of approximately 60 days.

A public consultation forum is proposed to be held to provide an overview of the CRIS and answer questions. Further information and registration details will be sent to stakeholders.

For a summarised list of all the recommended regulatory changes for the package of preventive and pro-active regulatory reforms, go to Table 3.

A full list of questions, has been included as a prompt to help provide feedback on this recommended option, at Appendix 1.

Introduction

The Queensland Government is reviewing its resources safety and health laws, namely the *Coal Mining Safety and Health Act 1999* (CMSHA), the *Mining and Quarrying Safety and Health Act 1999* (MQSHA), the *Explosives Act 1999* (Explosives Act) and the safety related aspects of the *Petroleum and Gas (Production and Safety) Act 2004* (PG Act).

The vision of Resources Safety and Health Queensland (RSHQ) is zero serious harm across the state's resources sector. Our mission is to regulate, educate and assist industry in meeting its obligations to protect and promote the safety and health of persons from risks associated with mining, quarrying, explosives and petroleum and gas. The safety and health of workers is protected by ensuring that the risk of injury or illness from regulated activities is at an acceptable level and that obligation-holders receive the support, guidance and information necessary to discharge their safety and health obligations. RSHQ issues safety alerts, safety bulletins and industry performance reporting, as well as other hazard and risk related materials to share safety information and learnings with industry. RSHQ also conducts inspections, audits and investigations as part of its risk-based compliance and enforcement program.

Why are we reviewing these laws?

The Queensland Government is committed to achieving a strong resources sector. The resources industry is a key driver of the Queensland economy, creating jobs and delivering a range of broader benefits for the state. In 2020-21 the resource industry contributed \$27.5 billion to Queensland's Gross State Product.² A strong resources sector depends on its industries having safe and healthy workplaces.

Employment in the resources sector

The resources sector can be divided into the following sub-sectors: coal and mineral mines; quarries; explosives; and petroleum and gas. Coal and mineral mines employ most resources sector workers, with just over 36,000 employed in coal mines and approximately 14,000 in mineral mines. Quarry workers account for almost 1,500 employees.³

² Department of Resources, *Queensland Resources Industry Development Plan*, June 2022, available at https://www.resources.qld.gov.au/_data/assets/pdf_file/0005/1626647/qrldp-web.pdf.

³ Internally sourced data, publicly available at <https://www.data.qld.gov.au/dataset/quarterly-mines-and-quarries-safety-statistics-data/resource/9722bfd4-9618-4b52-95de-e7c8f03cfd6b>.

The mining and quarry sector can be broken down into more specific areas of operation with operator numbers at 31 December 2021 as shown in Table 1.

Table 1 - Mining and quarry sector operator numbers

Sector	Operator numbers
Coal (exploration)	236
Coal (surface)	63
Coal (underground)	14
Metalliferous (exploration)	251
Metalliferous (surface)	1,015
Metalliferous (other)	19
Metalliferous (underground)	82
Quarries	349

In the explosives industry, the number of workers is estimated to be around 1,500 as at 31 December 2021.

For the petroleum and gas industry, RSHQ regulates the safety and health of 358 petroleum and gas entities which range in size from petroleum production companies with thousands of wells, gas pipeline companies, and local hardware stores that supply LPG gas. The regulator also has a role in authorising gas workers, engineers and entities that approve gas devices.

Brady Review

In the review of all fatal accidents in Queensland mines and quarries from 1 January 2000 to 31 July 2019 (the Brady Review)⁴; Dr Sean Brady, forensic structural engineer, reviewed and analysed fatality and serious accident data across this period. This review revealed that a large number of the 47 individual fatalities during this period involved inadequate training of workers; and controls meant to prevent harm were ineffective, unenforced or absent, with no or inadequate supervision. The Brady Review found almost all of the fatalities were the result of systemic, organisation, supervision or training failures, either with or without the presence of human error. Human error alone would not have caused, and should not be accepted, as the cause of, these fatalities. For instance, the review of each of the 47 individual fatalities revealed:

- 17 of the fatalities involved no human error on the part of the deceased
- 17 of the fatalities involved a lack of task-specific training and/or competencies for the

⁴ Dr Sean Brady, Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019, December 2019, available at <https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2020/5620T197.pdf>.

tasks being undertaken. A further nine fatalities involved inadequate training

- In 32 of the 47 fatalities, the worker was required to be supervised when undertaking the tasks and 25 of these involved inadequate or absent supervision
- The majority of the 47 fatalities involved at least one failed or absent control that could potentially have prevented the fatality
- There were 10 incidents involving known faults/issues, where individuals were aware of them, but no action was taken
- Nine fatalities had known near misses occur prior to the fatality
- In some cases, prior fatalities had occurred in a similar manner.

The Brady Review identified an evident pattern over the past 19.5 years which was characterised by periods where a significant number of fatalities occurred, followed by periods where there were few to none. The Brady Review therefore suggests that industry goes through periods of increasing and decreasing vigilance, or that periods of success breed complacency, which can lead to failures and fatalities (referred to as “a drift into failure”).

Dr Brady indicated that to remedy this, a change in approach is required to how the industry identifies and controls hazards as well as how it recognises and addresses them when these controls are eroding or ineffective. He went on to recommend that the principles of High Reliability Organisation theory (HRO theory)⁵, where organisations focus on identifying incidents that are the precursors to larger failures and then use this information to prevent failures occurring, be adopted by the industry.

These signals provide an opportunity to identify and act on existing hazards in order to remove them and is key in preventing the drift into failure. In order to support industry to operate like high reliability organisations (HROs), Dr Brady recommended that the regulator (RSHQ) play a key role in collation, analysis and dissemination of incident and fatality data collected from industry to inform safety learnings and future direction for safety and health approaches for industry.

The Brady Review also identified under-reporting of safety and health incidents and highlighted the importance of establishing a strong and open reporting culture. Dr Brady recommended that the regulator should develop a simplified incident reporting system that is, easy to use in the field, encourages open reporting and maximises the probability of reporting. A strong reporting culture is a core aspect of HRO theory. Dr Brady considered that this “culture is based

⁵ Andrew Hopkins, *Learning from high reliability organisations* (Sydney, CCH Australia Limited, 2009).

upon the organisation's practices, not the attitudes or mindsets of individuals working for the organisation."⁶

What is HRO theory?

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 strong safety and efficiency records; managing to avoid or minimising catastrophic incidents – for example, air traffic control. HROs are committed to safety at the highest level of the organisation and throughout. 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.⁷ 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.⁸
- 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 other teams.⁹ HROs recognise this may require redundancy in expertise, systems and competency, which they do not seek to avoid.¹⁰

A list of the Brady Review recommendations is contained in Attachment 1.

Note that the review period regarding the 47 fatalities considered as part of the Brady Review was from 1 January 2000 to 31 July 2019. Since then, there have unfortunately been a further

⁶ Dr Sean Brady, Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019, December 2019, available at <https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2020/5620T197.pdf>.

⁷ Karl Weick and H. Roberts, 'Collective Mind in Organizations: Heedful Interrelating on Flight Decks' (1993), 38(3) *Administrative Science Quarterly*, 357-381.

⁸ Andrew Hopkins, *Safety, Culture and Risk: The Organisational Causes of Disasters* (CCH, Australia, 2005) 15.

⁹ KE Weick and KM Sutcliffe, *Managing the unexpected - assuring high performance in an age of complexity* (Jossey-Bass, San Francisco, CA, 2001).

¹⁰ Andrew Hopkins, *Safety, Culture and Risk: The Organisational Causes of Disasters* (CCH Australia, 2005).

five fatalities in Queensland mines¹¹, bringing the total to 52 lives lost since 1 January 2000.

Safety resets

In July and August 2019, 1,197 safety reset sessions¹² 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.

The Minister initiated an industry-wide safety reset in the second half of 2021 which also included workers from the petroleum and gas and explosives sectors. This safety reset focused on the theme of 'chronic unease', (focusing on pre-cursors to incidents and learning from these, a key theme in the Brady Review) and the importance of reporting.

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 the serious accident on 6 May 2020 at the Anglo American operated Grosvenor mine. This accident involved an ignition of methane and five miners suffered 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.

¹¹ Single fatalities occurred in Queensland coal mines on 25 November 2019, 12 January 2020, 14 September 2021, 21 November 2021 and 25 March 2022.

¹² Safety Resets are meetings joined by management, union representatives and workers to re-commit to work collectively toward a Queensland resources industry free of injury and fatality. Thus, resetting the approach towards safety and health in Queensland's mining industries.

The BoI made inquiries into the incidents that would result 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 incidents occurring in the future. Considerations were to include the nature of any employment arrangements which may have had an effect on the level of risk workers were exposed to.

Over a 12-month duration, the BoI obtained information through assistance from the community, interviews of people with knowledge of relevant facts including independent experts, testimony at public hearings from industry and the regulator, documentary evidence, and research.

Across its two reports the board made findings and recommendations for industry, unions, the regulator and other stakeholders. The Queensland Government has given in principle support for the recommendations of the BoI.

What has already been done?

The *Resources Safety and Health Queensland Act 2020* (RSHQ Act), which commenced on 1 July 2020, established RSHQ as an independent statutory body responsible for regulating worker safety and health in Queensland's resources industries.

The findings of the Brady Review into serious accidents in the mining and quarrying sector over the past two decades and the BoI into a serious accident at the Grosvenor underground mine provide industry stakeholders with a clear assessment of where deficiencies exist and where improvements can be made. During 2020-21, RSHQ continued to progress work relating to the findings and recommendations of the Brady Review by focussing [initially] on implementing non-regulatory measures, while commencing the longer-term work on regulatory improvements. 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. The regulatory changes are still required to address several legislative gaps and will complement initial efforts. This includes provisions to facilitate an extension of time for operators to provide a report concerning a serious accident or HPI investigation which will assist with more

meaningful reporting; improved information-sharing and information-disclosure provisions to ensure safety learnings and statistical information are better shared with industry and other safety and health regulators, etc.).

RSHQ provided support to the Grosvenor mine immediately following the serious accident at the mine on 6 May 2020 and in the process for re-entry to the mine. A significant investigation by the inspectorate was undertaken, providing a large body of evidence which supported the Bol findings and recommendations. RSHQ continues to progress implementation of the recommendations and findings made from the Bol.

In addition, RSHQ initiated a project to progress legislative proposals that modernise regulatory enforcement and strengthen the safety and health outcomes of the resources sector, the 'Facilitating High Reliability Organisation Behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement' project. This includes responding to the recommendations from the Brady Review and the Bol.

RSHQ has also progressed regulatory amendments to strengthen safety and health protections for resources workers, including improvements for methane gas management and requirements for explosion barriers in underground coal mines; lowering exposure limits for respirable coal dust and respirable crystalline silica in mines; introducing mandatory respiratory health surveillance for mineral mine and quarry workers; strengthening explosives security clearance requirements and provisions to operationalise the gas device approval authority (GDAA) framework.

During 2020-21, RSHQ released ResHealth, a new electronic occupational health surveillance system that allows coal mine workers, doctors and employers to engage directly with an online platform to complete health assessments. This provides easier access to quality health data and enhances health outcomes for current and former mine and quarry workers. RSHQ also partnered with Heart of Australia to deliver health assessment services to remote and regional Queensland coal, mineral mine and quarry workers, with the construction of a first of its kind mobile health unit commencing in August 2020.

The Minister initiated an industry-wide safety reset in the second half of 2021, similar to the activity undertaken across the mining and quarrying sector in 2019, with the inclusion of workers from the Petroleum and Gas sector and the Explosives sector. This safety reset focused on the principal findings from the Brady Review around chronic unease and the importance of reporting.

Previous consultation

This CRIS follows ongoing consultation with key stakeholders including the mining, quarrying, petroleum and gas sectors as well as unions and government departments.

In 2013, a CRIS was released entitled 'Queensland's Mine Safety Framework' (the 2013 RIS). That process included consultation on proposals for additional certificates of competency, additional court orders, consistent limitation periods for prosecutions and court jurisdiction for prosecutions. A summary of stakeholder concerns relating to the 2013 certificates of competency proposal (which is different to the current proposal) is at Attachment 2. Since that time, these proposals have been considered in more detail and are discussed in the current CRIS.

The concerns industry expressed in relation to the 2013 certificates of competency proposal are not considered to be necessarily applicable to the 2022 proposal, as this proposal is focused on coal mining positions which are managing critical risks; and because these critical risks have been associated with deaths and serious incidents in recent years. Lessons have been learned from the Brady Review, and the BoI.

Support for additional certificates of competency is consistent with recent industry support for continuing professional development for those with certificates of competency, or site senior executive (SSE) notices, and a focus on ensuring critical controls are effectively implemented. The processes of the Board of Examiners (BoE) have since been enhanced including through improved software systems.

Consultation about key topics and priorities has continued with key stakeholders, and proposals have also been strongly influenced by the recommendations of the BoI and the Brady Review.

Identification of the problem

What is the problem?

Too many lives are tragically lost or significantly changed by fatal or serious injuries in the resources sector. If we maintain the status quo, history indicates that there will likely be in order of 12 fatalities over any five-year period. This is unacceptable. Complacency cannot be accepted, and action is required to maintain vigilance and to prevent drift into failure. The resources industry is a highly hazardous one and requires risk to be at an acceptable level to prevent incidence of fatalities and serious injury.

The legislative framework for the mining industry introduced under the CMSHA and the MQSHA (the Mining Safety Acts) were the outcomes of an extensive tripartite process between government, industry and unions following the Moura No. 2 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.

The significant impact of the Mining Safety Acts and subordinate legislation is strongly suggested by the absence of multiple fatality disasters and an overall reduction in the rate of fatalities per year since its introduction. However, fatalities are still occurring, and this is unacceptable for the safety and health of resource sector workers. Prior to January 2000, a total of 1,451 workers had lost their lives in the Queensland's mining and quarrying industry since 1877. A total of 47 mining industry fatalities occurred between January 2000 and the end of July 2019 (refer Figure 1).¹³ A considerably higher number of fatalities occurred per financial year between 1900 and 2000¹⁴ (refer Figures 2 and 3) than occurred in the review period from January 2000 and the end of July 2019. When comparing mining fatalities to other work-related fatalities, in the 2019 annual year there were a total of four work related fatalities in the mining industry in Queensland, accounting for a fatality rate of 6.0 per 100,000 workers, which was the third highest work-related fatality by industry rate.¹⁵

The Brady Review found that there is a fatality cycle evident in the industry – meaning, there are periods when fatalities occur, followed by periods when there are few to none. This is demonstrated in the following fatality charts. An explanation for this is that when a significant number of fatalities occur, industry tightens up safety requirements in response; however, this may then be followed by a drift into complacency and failure where the fatality rate increases. This can also be demonstrated in the fatality cycle, in the financial year of 2004-05 where there were four fatalities, but in the following financial year there were half the number of fatalities (two) and then in 2006-07 there were four fatalities. A similar cyclical pattern continues in the available data.

¹³ Dr Sean Brady, Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019, December 2019, at <https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2020/5620T197.pdf>.

¹⁴ As above.

¹⁵ Workplace Health and Safety Queensland, Key work health and safety statistics, Queensland 2020 available at https://www.worksafe.qld.gov.au/data/assets/pdf_file/0024/70728/6336-key-whs-statistics-qld-2020.pdf.

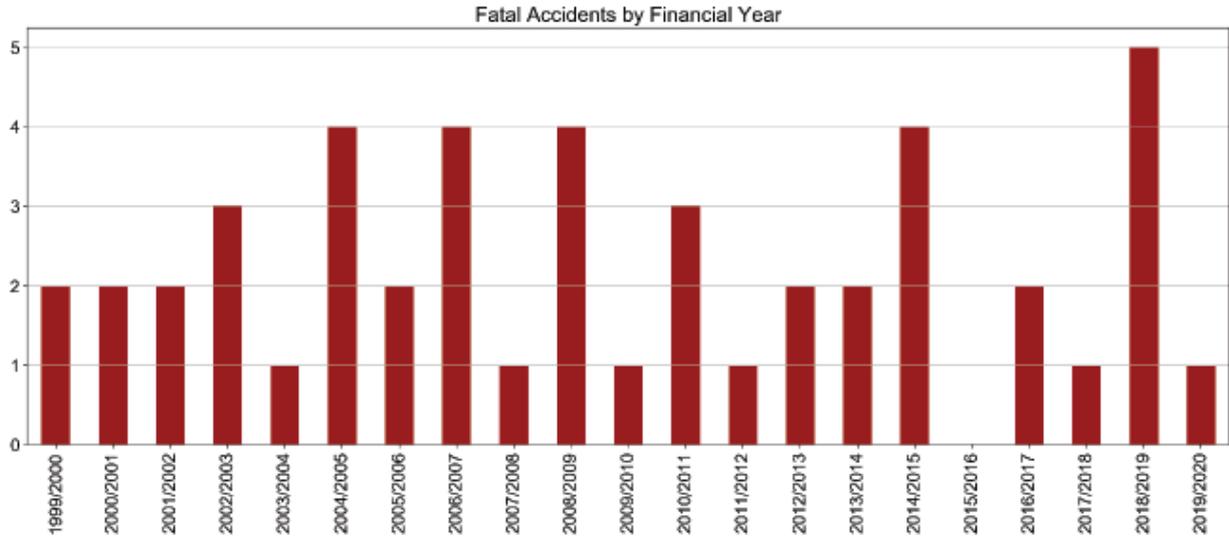


Figure 1 - Number of fatalities in each financial year for the review period
 -Note the '2019/2020' result is to 31 July 2019 only; total of three fatalities for 2019-20 period.

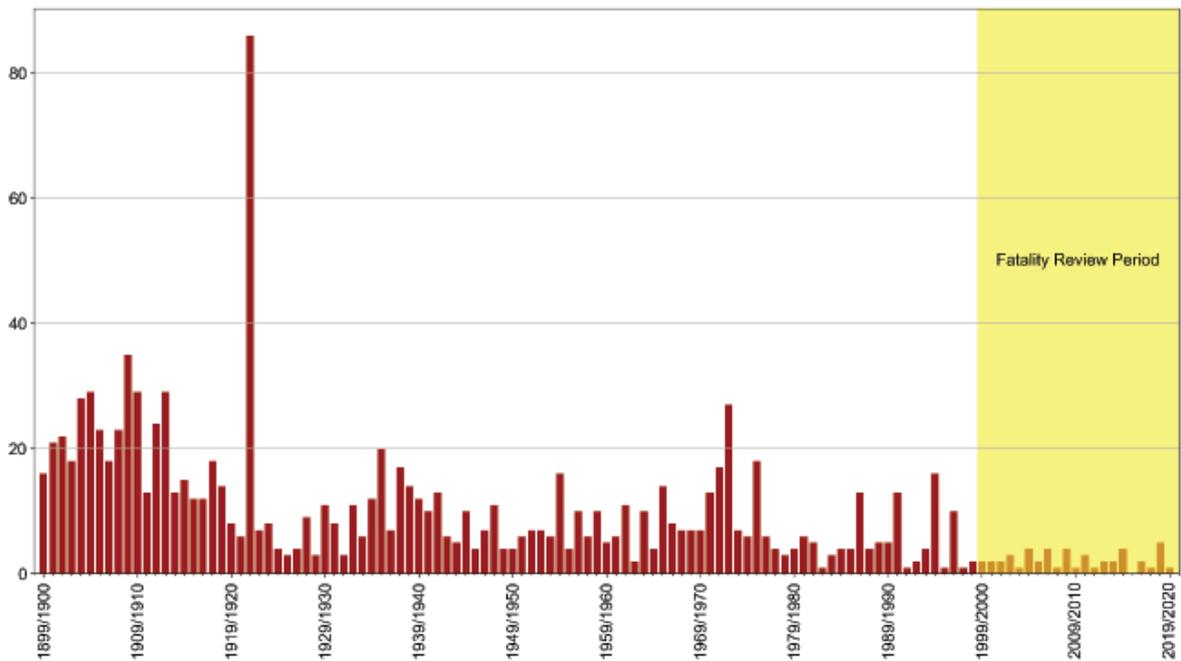


Figure 2- Number of fatalities per financial year from 1900 to July 2019

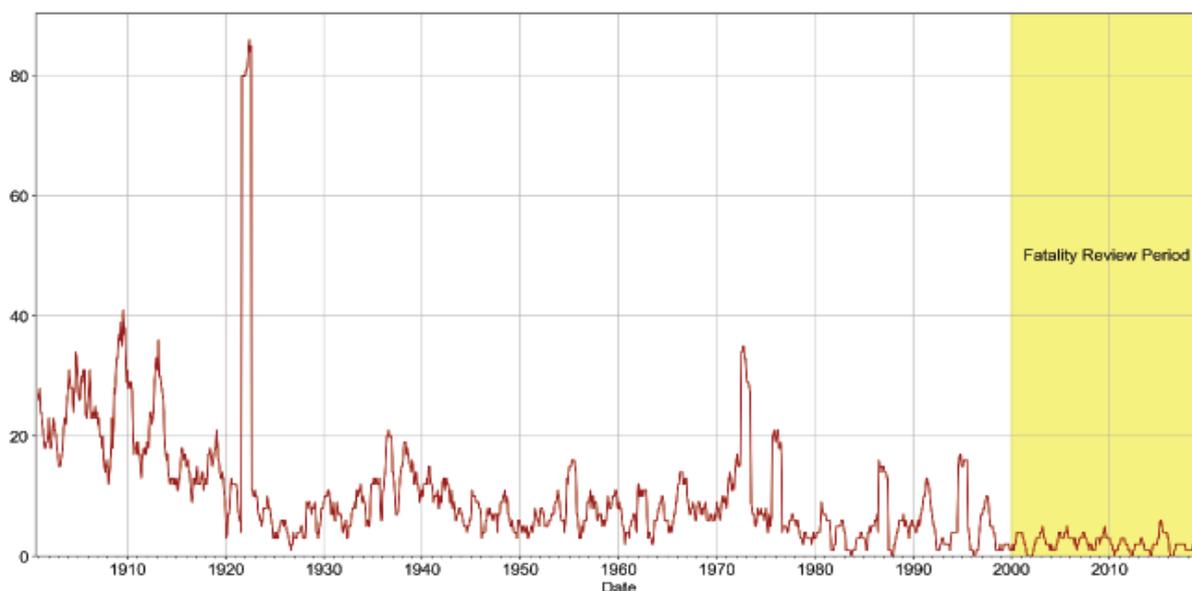


Figure 3 - 12 month rolling sum of fatalities from 1900 to 2019

Figures 4 and 5 (below) show the relationship between HPIs and fatalities, and HPIs and serious accidents (respectively) by sector for the review period. The data demonstrates that there were significantly more HPIs reported in the surface (i.e., open cut) coal sector than in any other industry; however, there were also significantly more hours worked in this sector compared to the other sectors.¹⁶

High Potential Incident and Fatality Totals by Sector

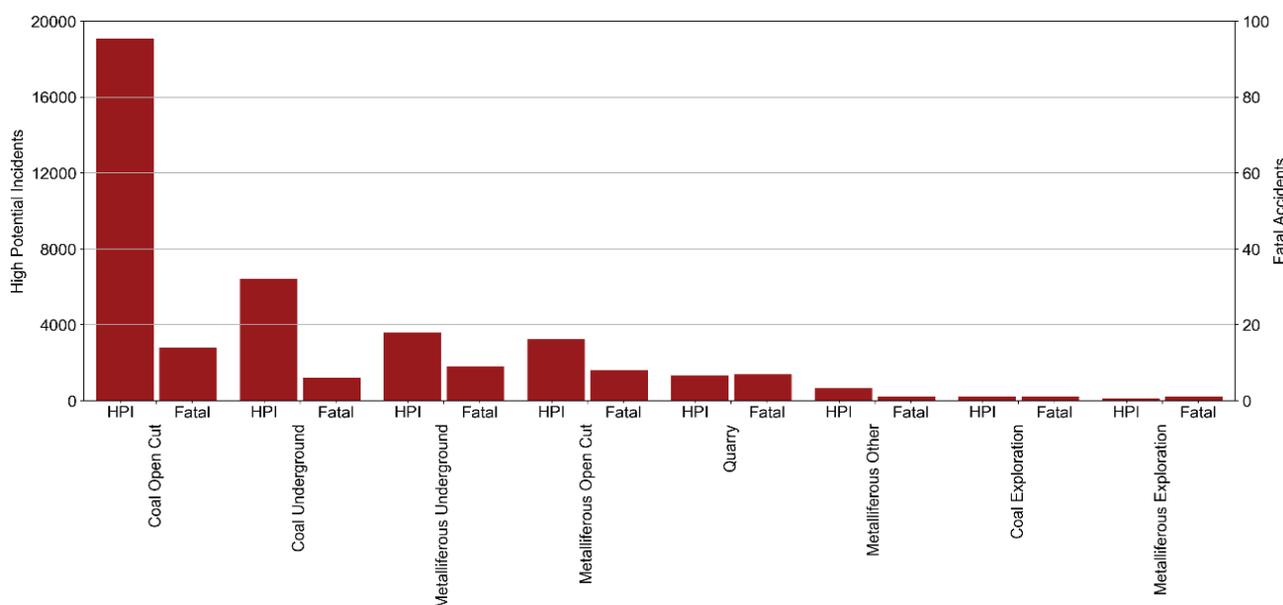


Figure 4 - HPI and fatality totals by sector

¹⁶ Dr Sean Brady, Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019, December 2019, at <https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2020/5620T197.pdf>.

High Potential Incident and Serious Accident Totals by Sector

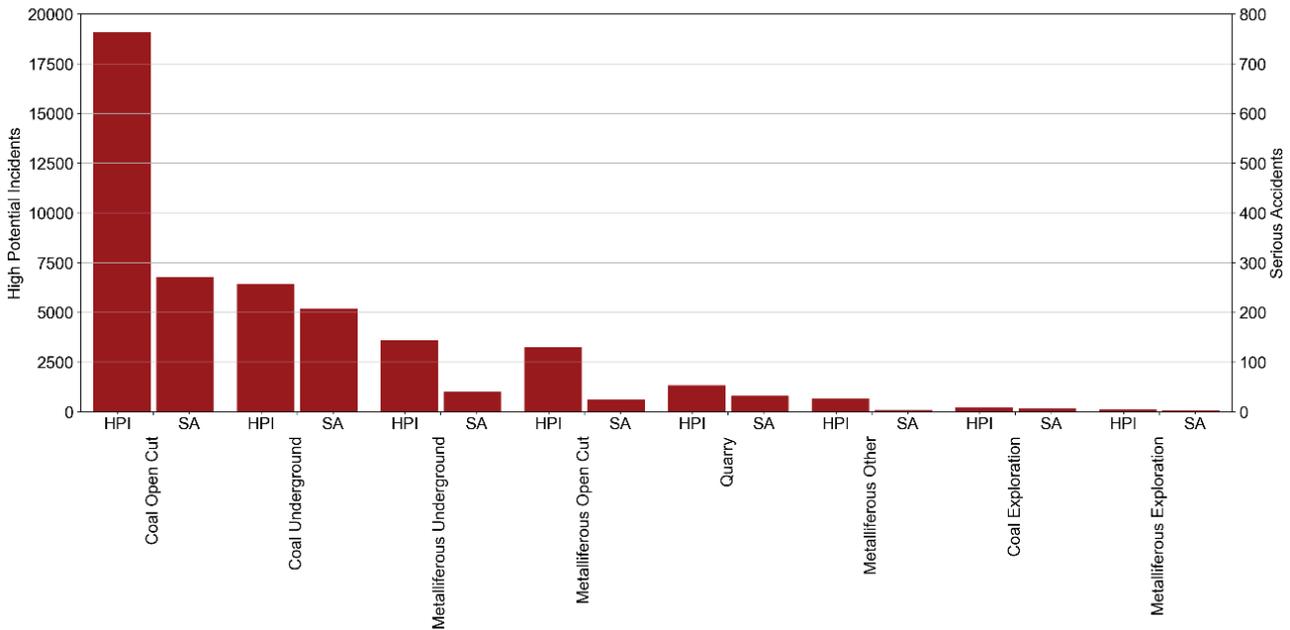


Figure 5 - HPI and serious accident totals by sector

The data demonstrate that approximately 75-85 per cent of HPIs do not result in injuries and as Brady states, “these HPIs are near misses, which offer genuine opportunities for the industry to identify hazards and remove them before they can cause harm.”¹⁷

The Brady Review also found that the causes of fatalities are typically a combination of everyday straightforward factors such as a failure of controls, a lack of training and/or absent or inadequate supervision. They were not attributable to a single cause such as human error, bad luck or freak accidents. Many were preventable and there was rarely a single cause. Almost all of the fatalities were the result of systemic, organisational supervision or training failures, either with or without the presence of human error.

Figure 6 (below) is adapted from information in the Brady Review and provides a causal diagram which demonstrates that an accident is a result of multiple factors – i.e., physical, individual, supervision and organisational.

¹⁷ Dr Sean Brady, Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019, December 2019, at p.43 <https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2020/5620T197.pdf>.

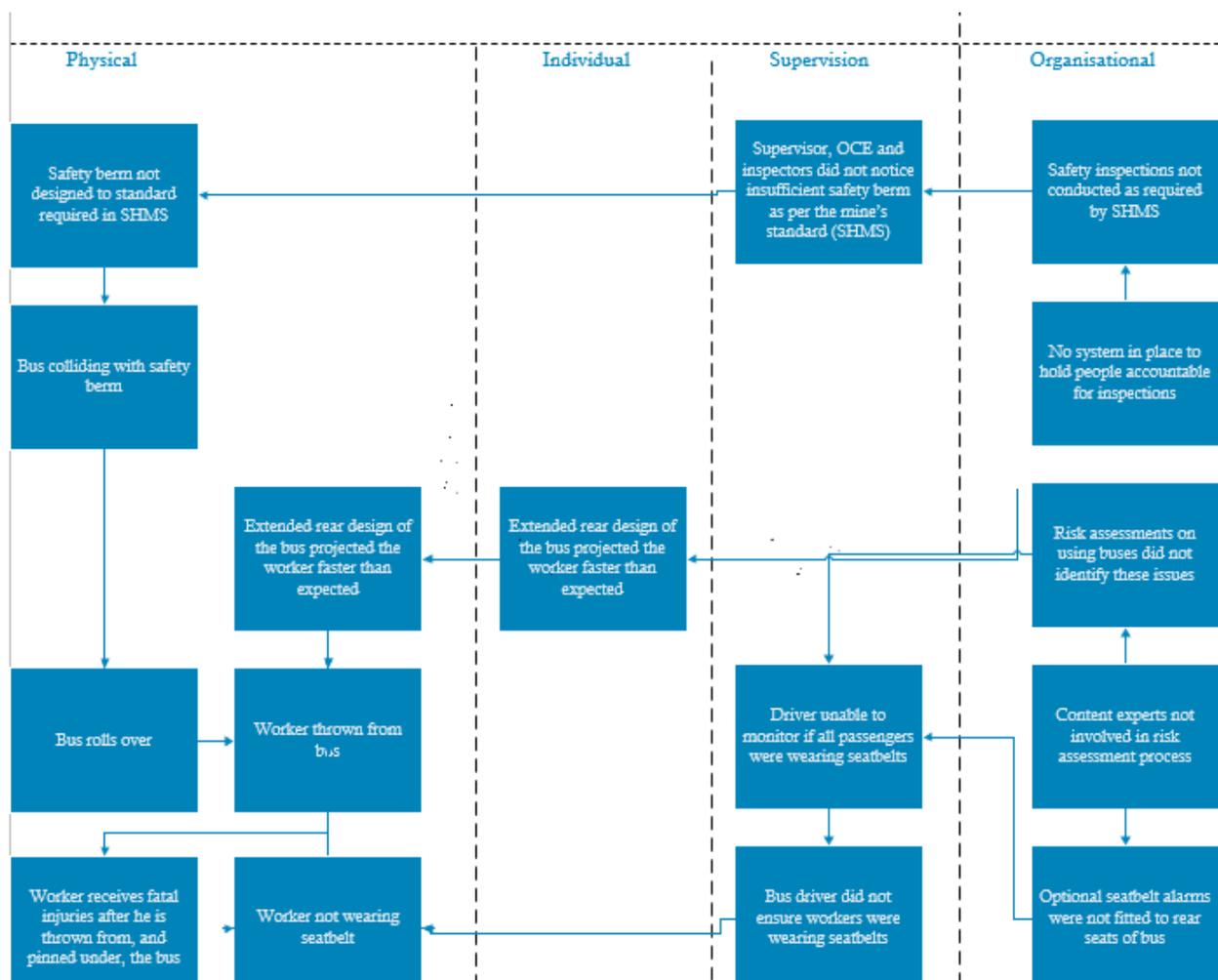


Figure 6 - Accident causal diagram adapted from the Brady Review

The Brady Review also indicated that some mines are not learning from past mistakes, fatalities and HPIs. Specifically, the Brady review found that “there were 10 fatalities involving known faults, where individuals were aware of them, but no action was taken” and that “9 fatalities had known near misses occur prior to the fatality. In some cases, prior fatalities had occurred in a similar manner”.¹⁸ It is unclear what the barriers to implementing effective system improvements and learning from past mistakes were in relation to these fatalities. Under reporting of safety and health incidents was also identified as a key issue by the Brady Review which stressed the importance of a strong and open reporting culture to improve safety. By implementing recommendations from the BoI and the Brady Review and, particularly, supporting industry through implementing approaches consistent with HROs (e.g., a strong reporting culture), it is expected these previous failures will not be repeated in future.

¹⁸ Dr Sean Brady, Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019, December 2019, at <https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2020/5620T197.pdf>.

On 6 May 2020, a serious accident occurred at the Anglo American Grosvenor mine, where there was ignition of methane, resulting in five miners suffering extensive burns to their upper bodies and airways. The Bol was established to inquire into this event along with 40 HPIs involving methane exceedances occurring at four mines between 1 July 2019 and 5 May 2020. The inquiry made recommendations for improving safety and health practices and procedures and for mitigating against the risk of similar incidents in the future. Key safety concerns raised by the Bol inquiry and their recommendations are summarised in Table 2.

Table 2 - Bol key safety concerns and legislative enhancements

Recommendation number	Overview of issue and recommendation	CRIS proposed changes
Recommendations 19 (Bol Report, Part I) and 6 (Bol Report, Part II)	On the evidence before the Bol it found that there were a significant number of methane exceedances occurring at a number of mines which should be a rare occurrence. The Bol reviewed these exceedances and found that they should have been treated as an indicator of a failure of critical controls for methane management, namely ventilation and gas drainage. The Bol found on the evidence before it that these methane exceedances, however, were not identified at the time as involving a failure of a critical control when they should have been. The Bol were of the view that the legislation should be amended to specifically require the development and implementation of critical controls.	Enhanced requirements for critical controls
Recommendations 13, 14 and 15 (Bol Report, Part I)	Although certain safety critical roles require the incumbent to hold certain competencies – this is not the case when a person undertakes these duties while an incumbent is absent. Evidence presented to the Bol indicated that a person appointed to act as the SSE during an SSE’s absence of more than 14 days ought to hold a first or second class certificate of competency. Similarly, a person appointed to have control and management of an underground mine when the underground mine manager (UMM) is not in attendance ought to have either a first or second class certificate of competency. On the evidence before it, the Bol found that an SSE for an underground coal mine ought to be the holder of a first class certificate of competency. The Bol were of the view that the current arrangements were not satisfactory and were not adequate to protect worker	Improved competency requirements for safety critical roles

	safety.	
Recommendation 12 (BoI Report, Part I)	Current legislation (CMSHA and the CMSHR) does not require training to include the statutory obligations imposed on various persons and entities at a mine. After hearing the evidence before it, the BoI found it would be beneficial for safety for the training scheme to cover the applicable legislation including, but not limited to, the legislative safety and health obligations.	Improved training requirements
Recommendation 25 (BoI Report, Part I)	After hearing evidence, the BoI identified that where a coal mine operator negligently caused the death of a worker, they may not be liable for an industrial manslaughter offence where a labour hire agency or independent contractor was the employer of the worker. This is because the industrial manslaughter offence makes the “employer” liable. Consequently, the BoI raised that the coverage of the industrial manslaughter offences may not reflect Parliament’s intention to treat deaths of workers on all work sites consistently.	Improved coverage for industrial manslaughter offence provisions
Recommendations 23, 24 and 25 (BoI Report, Part II)	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 safety and health of those employees. The BoI were of the view that further coverage of labour hire obligations was needed in the legislation.	Improved coverage of labour-hire agencies and their obligations under the legislation
Recommendation 29 (BoI Report, Part II)	The evidence before the BoI indicated that mine workers hesitate to complain about safety issues for fear of reprisal action. The BoI were of the view that the reprisal provisions in the legislation could be clarified to strengthen protection for workers.	Strengthen protection for workers from reprisal actions when raising safety issues
Recommendation 27 (BoI Report, Part II)	On the evidence before it, the BoI found that there is a need to improve the mechanisms for safety issues to be raised by workers and that underreporting and non-reporting of safety risks is a problem, particularly in an industry where there is an increasing trend of contractor employment. This is because contractor workers are reluctant to raise health and safety issues	Changes for safety committees

	<p>for fear of losing their jobs.</p> <p>The BoI were of the view that the legislation should be amended to allow for safety committees for the coal mining sector to improve the mechanisms for safety issues to be raised by workers.</p>	
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Sadly, there have been further fatalities since the Brady Review in 2019 and a total of 52 fatalities have occurred since January 2000. While no dollar value can ever be placed on a human life, in economic terms, the national Office of Best Practice Regulation has suggested that the value of an avoided death is \$5.1 million.¹⁹ As a consequence of a fatality there are substantial and unquantifiable negative social and psychological impacts on the families, friends and communities impacted by a mining disaster. Quantifiable losses are also incurred as mines stand to lose significant income from the temporary closure of a mine site during the investigation of a fatality. In the most serious scenarios, there can also be some sterilisation (permanent loss) of coal resources due to conditions being too dangerous around the impacted seam.

If the current approach to safety continues to be used, then similar safety performance and outcomes could be expected. This is supported by the Brady Review, which noted that if the industry continues to take a similar approach to safety, using the same philosophy and methodologies adopted over the past 19.5 years, then similar safety outcomes should be expected.²⁰ This presents an unacceptable risk to human health and safety. A changed approach and changes to the safety framework for the resources sector is required to improve safety performance.

Changes to the safety framework also need to consider the effectiveness of compliance and enforcement tools currently available under the four Resources Safety Acts, as many of these tools have remained largely unchanged since the introduction of the respective Acts and have not kept pace with those available under comparable and more contemporary safety and health legislation (e.g., the Queensland *Work Health and Safety Act 2011* (WHSa) and resources health and safety laws in other key mining states such as New South Wales (NSW) and WA).

¹⁹ The Commonwealth Office of Best Practice Regulation, 'Best Practice Regulation Guidance Note Value of statistical life' at <https://obpr.pmc.gov.au/sites/default/files/2021-09/value-of-statistical-life-guidance-note-2020-08.pdf>, August 2021.

²⁰ Dr Sean Brady, Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019, December 2019, at <https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2020/5620T197.pdf>.

Objective of government action

The objective of the government action is to support the Queensland resources industry to protect workers through implementation of appropriate reforms to reduce the rates of serious accidents and fatalities.

Consideration of options and impact analysis

The following options have been considered to address the identified problems and are proposed for public consultation.

Option 1 – Package of preventive and proactive reforms: This comprehensive preventive and proactive package of regulatory safety reforms will include responding to recommendations from independent reviews such as the Brady Review and the Bol.

The proposed preventive and proactive regulatory reform package is detailed in Table 3 (below) and includes:

- **Facilitating the growth in HRO behaviours** within the resources sector. To achieve this, emphasis will be placed on reforms that improve the implementation of critical controls by industry, increase competency requirements for safety critical roles, improve training, continual professional development requirements, incident notification and reporting and strengthen protections for workers raising safety issues.
- **Modern regulatory enforcement** powers. This will include enhancements to existing tools such as to the directives framework and the introduction of new tools such as enforceable undertakings and enhanced court orders.
- **Contemporary legislation**. This involves updating the regulation to provide for emerging operations and enhancing the existing frameworks e.g., to ensure there is adequate coverage of labour hire agencies; remote operation centres; and to improve the coverage of the industrial manslaughter offences.
- **Consistency of Resources Safety Acts**. This will ensure consistency of regulation for the Resources Safety Acts.
- **Operational amendments**. This will help ensure legislation is kept contemporary and effective.

A number of additional amendments are also proposed to be progressed.

Table 3 - List of proposals to be progressed under Option 1

Proposal description
Facilitating the growth in HRO behaviours
Mandatory risk control requirements for coal mines and mineral mines and quarries to be clarified for critical controls .
Additional competency requirements for key critical safety roles for coal mines and for those left in charge during absences in key safety critical roles.
Supporting framework for continuing professional development (CPD) including for compliance and enforcement for coal and mineral mines and quarries. This will support the CPD Regulations.
Establish site safety and health committee (SSHC) for coal mines.
Improved data and incident reporting including removal of lost time injury (LTI) as a safety indicator; providing for an extension for up to 12 months for a report in relation to an incident to be provided; and consistent penalties for failure to report across the Resources Safety Acts.
Improved information sharing to support the transition to HROs.
Modern regulatory enforcement
The ability to issue enforceable undertakings to allow for the regulator to enter into binding agreements in situations where specific improvements to safety and health management are required.
Broaden court order provisions to enable sentencing to be tailored to the situation, achieving a better balance between increasing compliance, improving safety outcomes and deterrence.
Refining and improving the directive powers across all Resources Safety Acts.
Contemporary legislation
Ensuring there is clarity concerning contractors and labour hire agencies in the Mining Safety Acts and their safety and health obligations.
Refining the industrial manslaughter provisions to ensure they apply to whomever employs/engages or arranges for a worker to perform work and whose negligent conduct caused the death of a worker (and a senior officer of such an entity).
Ensuring there is clarity concerning the obligations of remote operating centres off-site supervisors for coal mines.
Contemporary board of examiners changes for the appointment of an independent chairperson and a board member with demonstrated expertise in the assessment of competence. Changes so the board of examiners (BoE) is under the Minister's control and direction for appropriate matters.
Consistency of Resources Safety Acts
Align the court jurisdiction for prosecutions across all Resources Safety Acts. Proceedings would be heard under the mainstream Magistrates court system. This would ensure the same appeal rights.
Allowing for consistent timeframes for the commencement of prosecutions across all Resources Safety Acts, namely so they can be commenced up to two years after the offence comes to the

notice of the complainant.
Enhance protection from reprisals by prescribing appropriate and consistent penalties for reprisal offences and providing a clear definition of ‘detriment’.
To ensure consistent board of inquiry offence provisions across Resources Safety Acts that are both compatible with human rights, and the associated penalties are commensurate with the level of seriousness of the offence.
Ensure that the penalties for obstruction of inspectors, officers or representatives are consistent across the Resources Safety Acts.
Provide consistent penalties for failing to provide help to SSHC representatives and committees .
Operational amendments
Improve the explosive security clearance regime including removing duplicate requirements across comparable regimes that also impose security screening standards i.e., employees of licensed weapons dealers.
Provide clarity and consistency with regard to legislative training requirements for coal mine workers, similar to those already present in legislation for other mine workers.
Address ambiguity in the gas device approval authority scheme.
Streamline domestic biogas digesters requirements, including exempting them from being subject to the same standards as operating plant.
Additional proposed amendments: clarifying amendments to the Mining Safety Acts arising from the University of Queensland review to help confirm the intent of current provisions and improve workability (refer Attachment 3); and other minor amendments (refer Attachment 4) including RSHQ Act consequential amendments (refer Attachment 5 for details on these).

Option 2 – Status quo:

No change. This option proposes to continue the existing framework in its current form. This option is not recommended as it will not lead to any further safety and health improvements or to a reduction of fatalities and incidents. This option does not support continuous improvement and will not meet the policy objectives outlined in the CRIS.

Option 3 – Non-regulatory option:

This option proposes that RSHQ undertake a broad education program to assist the resource sector industry to adopt principles and practices of HROs. This would include focusing on the need for industry to implement critical controls, to identify precursors to fatalities, and to use these to prevent accidents and fatalities. Under this option, industry should focus on ensuring workers are appropriately trained and supervised for the tasks they undertake. This would be supported by the regulator within existing legislative powers – obtaining, analysing and proactively sharing safety learnings from incidents and fatalities – as well as the regulator’s

inspection, audit and compliance program.

Without the further regulatory legislative changes to support this approach, it is not seen to be a viable option as the measures are not sufficient to achieve the objective of the CRIS. Professor Andrew Hopkins states that “educational programs have their place. But an educational program, by itself, cannot be expected to move the culture of an organisation in a HRO direction.”²¹ Hopkins discusses the need to address organisational practices – for the HRO regulator, this requires appropriate regulatory tools. Accordingly, it is considered this option alone is inadequate to achieve the objectives or deliver the required changes. It also does not implement the outcomes of the Bol which the government has committed to implementing.

A summary of the impacts from the three identified options is provided at Table 4.

Table 4 - Summary of impacts from identified options

Options	Impacts
Option 1: Package of preventive and proactive reforms	<p>This option will action expert recommendations from the Bol and Brady Review; will assist in reducing the incidence of fatalities and serious accidents; will encourage a reporting culture by improving the collection and analysis of incident reporting and data to enable industry learning; will facilitate industry to move to become HROs; will ensure that the resources sector has a more competent and informed workforce in relation to safety and health; will provide for an expanded toolkit for compliance and enforcement; will support workers to feel safe and to come forward with health and safety concerns; and will support the regulation to remain contemporary and keep pace with advancements.</p> <p>The costs of this package of reforms are not significant. The majority of the reforms have little or no cost impact on industry. Details of the cost impacts for each of the reforms is provided under the individual section which discusses the reforms. The proposal which does have cost implications for industry is that for additional certificates of competency. A full cost-benefit analysis has been undertaken for the additional certificates of competency proposal and this is included in Appendix 2. It demonstrates that the certificates of competency proposals will result in benefits to the present value of \$65.7 million or an annual equivalent value of \$10.1 million a year, far outweighing the cost associated with new certificates of competency for key statutory</p>

²¹ Andrew Hopkins, ‘A Practical Guide to becoming a “High Reliability Organisation”’, *Australian Institute of Health and Safety*, <<https://www.aihs.org.au/sites/default/files/A%20Practical%20Guide%20to%20becoming%20a%20High%20Reliability%20Organisation%20-%20Andrew%20Hopkins.pdf>>.

	positions of \$3.9 million as a present value or \$597,968 as an annual value.
Option 2: Status quo	This option will maintain the current state of play, will not yield any further safety outcomes and will likely maintain the current fatality and serious accident cyclical rates. The negative impacts of this approach will mean ignoring expert recommendations, failing to remedy identified issues with the legislative framework and the community and workers will not see the safety benefits proposed under Option 1.
Option 3: Non-regulatory option	<p>This option would rely solely on the regulator providing information to the resources sector, and encouraging the resources sector to share information, on how to improve safety and health outcomes. This option would rely on industry and workers voluntarily accessing and implementing the information. This option would be supported by the inspection, audit and compliance program of the regulator. This education program would be funded from RSHQ's operating budget. If serious accidents or fatalities occurred – they must necessarily receive priority over the education program.</p> <p>Given that this option involves an educative approach, which would not be supported by legislative changes, it is anticipated that it would have a minimal positive impact. RSHQ has explicitly incorporated this approach into its current compliance and enforcement policy, the first version of which was released in 2017. Industry performance in the intervening period demonstrates other impetus is needed to stimulate substantial improvement. It also would not address the BoI recommendations for legislative amendments, to which the Minister has publicly committed.</p> <p>This option is not seen as a viable as the measures are not sufficient to achieve the CRIS objective. Additional information in relation to Option 3 is provided at Appendix 3.</p>

Recommended option

RSHQ considers that Option 1 will meet the reform objectives, will deliver the greatest net benefit to workers, industry and the community and is therefore the recommended option. This option considers expert recommendations from the BoI and the Brady Review and is anticipated to provide a contemporary framework that is aimed at supporting industry to better protect workers through implementing approaches consistent with HRO theory to reduce the rates of serious accidents and fatalities.

Overall, the benefits provided by the package of reforms in Option 1 include:

- Improved risk management practices
- Improved competency of persons in safety critical roles
- Improvements for data and incident reporting and sharing safety information
- More effective compliance tools and orders
- Contemporary legislation which deals with emerging issues in the industry such as labour hire agencies and remote operating centres
- Improved mechanisms for safety issues to be raised by workers and improved protection for workers from reprisal action for raising safety issues
- A more consistent legislative approach across the resources sectors which provides certainty for the sector and more equitable treatment
- A reduction in regulatory burden (see the operational amendments)
- Continuous improvements to the legislation to support the effective and efficient administration of the legislation (see the minor amendments).

The ultimate benefit realisation from supporting industry to transition to HROs is a reduction in the rates of serious accidents and fatalities. This ought to translate to a reduction in the risk of a mining disasters, which has flow-on benefits, reducing the risk of mine closure and sterilisation of resources as a result of an explosion.

The costs of this package of reforms are not significant. The majority of the reforms have little or no cost impact on industry. Details of the cost impacts for each of the reforms is provided under the individual section which discusses the reforms. The proposal which does have cost implications for industry is that for additional certificates of competency. A full cost benefit analysis has been undertaken for the additional certificates of competency proposal and this is included in Appendix 2.

The additional certificates of competency will result in benefits to the present value of \$65.7 million or an annual equivalent value of \$10.1 million a year, far outweighing the cost associated with new certificates of competency for key statutory positions of \$3.9 million as a present value or \$597,968 as an annual value. The cost benefit analysis illustrates the potential benefits relative to costs and these include a decrease in injuries, a reduction in fatalities, a reduction in the risk of an underground coal mining disaster and a reduction in the risk of mine closure and sterilisation of coal resources as a result of an explosion.

RSHQ will consider the impact of the proposed reforms based on feedback to this CRIS before legislation is changed.

Human rights assessment

The introduction of some of the proposed legislative amendments is likely to engage human rights and some may also limit certain rights.

Queensland Government public entities, including RSHQ, have obligations under the *Human Rights Act 2019* (HR Act), to act and make decisions in a way that is compatible with human rights, and to give human rights proper consideration when making decisions – including legislative proposals. While legislation may limit human rights, the limitations must be proportionate i.e., in the least restrictive way possible to achieve the objectives of the legislation.

Compatibility with human rights has been considered in relation to the proposed legislative amendments and some human rights may be limited by the introduction of the proposed legislative amendments. This includes:

- Right to recognition and equality before the law (HR Act, section 15)
- Right to life (HR Act, section 16)
- Freedom of expression (HR Act, section 21)
- Right to property (HR Act, section 24)
- Right to privacy and reputation (HR Act, section 25).

Summary

Human rights have been considered as part of the proposal to amend the legislation. On balance, it is considered that the limitation to certain human rights is justifiable as the amendments aim to improve safety and health across the sector, promote the right to life and security for workers. Should the legislative amendments be assessed as the most appropriate response, a more detailed human rights impact assessment will be undertaken as part of the drafting process and, where appropriate, will incorporate feedback from stakeholders and those impacted.

Regulatory Impact Statement

Facilitating the growth in HRO behaviours

The following proposals aim to foster the adoption of HRO theory²² principles by the Queensland resources sector. The proposals will assist organisations focus on identifying incidents that are the precursors to larger failures, promote organisational resilience, improve the reporting of such incidents, and to also use incident information to prevent future failures occurring.

Introducing critical control management

Issue

The current Mining Safety laws do not attempt to cover every aspect of risk management but do cover mandatory risk assessment and risk control aspects. The Mining Safety laws require mine operators and site senior executives (SSEs) to ensure development and implementation of an effective SHMS based on risk assessment, risk control, and existing specific requirements. For the coal mining industry, this includes principal hazard management plans.

However, the continuing number of serious accidents and fatalities at Queensland mines and quarries is an indicator that traditional risk management practices are not yielding the required results and that improvements are needed to improve safety performance. The BoI and the Brady Review both presented information about the problem across the coal mining industry, and evidence that existing arrangements do not adequately address the problem.

While some coal mine operators already voluntarily apply critical controls, in general there is currently limited understanding of critical controls across the Queensland coal mining industry. Similarly, only larger operators in the metalliferous mining and quarry industries have started to implement critical controls.

The key issue is that more effective controls must be applied to prevent hazards from causing harm, especially principal hazards. Unfortunately, the current principal hazard management plan provisions for coal mining do not include a clear link to critical controls. Similarly, current risk and hazard management provisions for metalliferous mining and quarrying also do not clearly link to critical controls. The mandatory risk management framework under the Mining

²² Professor Andrew Hopkins, 2009, *Learning from high reliability organisations*, Sydney, CCH Australia Limited.

Safety laws could be improved through the addition of specific requirements relating to critical controls.

Rationale for government action

Critical control management (CCM) is a risk management process that focuses on identifying and managing controls that are critical to the prevention of catastrophic or fatal events. CCM is a progression in risk management practices, not a revolutionary change. Current risk management practices are still relevant, but CCM adds aspects that help organisations focus on, and more effectively manage, catastrophic risk.²³

The BoI identified that risk management of hazards at coal mines could be improved by implementing requirements for controls considered of critical importance or ‘critical controls’. Improvements would contribute to reducing future fatalities in the Queensland coal mining industry, through more effectively identifying, understanding and controlling hazards. The Brady Review identified that key causal factors behind underlying system failures that resulted in a large number of fatalities, included risk “controls meant to prevent harm being ineffective, unenforced or absent...”. Recommendations 2 and 5 of the Brady Review are most relevant and cover the failure of controls, and the need to focus on ensuring the effectiveness and enforcement of controls, including implementing more effective controls.

Both the Brady Review and the BoI also focused on HRO theory, which includes being proactive in seeking out hazards before they occur, and effectively controlling them (i.e., by embracing a “preoccupation with failure” and a “reluctance to simplify”). When hazards are identified they must be addressed with effective controls, rather than minimally managed with the least effective controls available.

The Brady Review recommended that the mining industry should adopt a number of principles of HRO theory, in order to reduce the rate of serious accidents and fatalities. This includes identifying incidents that are precursors to larger failures and using this information to prevent future failures and, where appropriate, implementing multiple layers of defence to promote resilience in systems and avoid over-simplification.²⁴ HRO incident reporting also identifies when hazards have not been adequately managed, through the risk controls used.

²³ M, Hassall and J Joy., *Effective and Efficient Implementation of Critical Control Management in the Australian Coal Mining Industry by 2020* (2016) Project No. C24006 Report, Australian Coal Association Research Program.

²⁴ Andrew Hopkins, *Disastrous Decisions: The Human and Organisational Causes of the Gulf of Mexico Blowout* (CCH, Australia, 2012).

The Brady Review observed that while the Mining Safety laws have made significant progress in making the industry safer, despite this progress, the current approach has not been sufficient to reduce the fatality rate to zero in the long term. The Brady Review also noted that no single change to the mining industry will reduce the fatality rate and stated that “what is instead required is a change in approach to how the industry identifies and controls hazards, as well as how it recognises and addresses them when these controls are eroding or ineffective.”

The BoI covered how some coal mine operators voluntarily apply critical controls based upon the International Council of Mining and Metals Critical Control Management – Good Practice Guide (ICMM guide), within the existing SHMS/risk management framework under the Mining Safety laws. The ICMM guide explains a critical control in the following way:

“A control is an act, object (engineered) or system (combination of act and object) intended to prevent or mitigate an unwanted event.

A critical control is a control that is crucial to preventing the event or mitigating the consequences of the event. The absence or failure of a critical control would significantly increase the risk despite the existence of the other controls. In addition, a control that prevents more than one unwanted event, or mitigates more than one consequence is normally classified as critical.”

However, voluntarily applying critical controls based upon the ICMM guide is not occurring across the industry, and there is limited understanding of how to effectively apply critical controls. This was evident in the BoI review of methane exceedances (i.e., HPIs) that occurred at the Grosvenor Mine, Oaky North Mine, Moranbah North Mine and Grasstree Mine. The BoI found that the critical controls of ventilation and gas drainage for methane management did not deliver the desired outcomes in terms of keeping methane concentration below prescribed levels. None of these HPIs were identified at the time as involving a failure of a critical control. Ventilation and gas drainage are critical controls in the management of methane to prevent a catastrophic incident such as an underground explosion and this should have been recognised.

The Brady Review recommended that industry needs to focus on ensuring the effectiveness and enforcement of controls to manage hazards. Given the serious accident frequency rate, industry should implement more effective controls (such as elimination, substitution, isolation, or engineering). The Brady Review reported that a significant number of the controls put in place in the aftermath of an incident were administrative in nature. The majority of the fatalities reviewed involved at least one failed, or absent risk control, that could have avoided the tragedy.

The BoI Report encouraged building on the concept of HROs by advocating for “critical control management as a risk management process focusing on identifying and managing the controls that are critical to the prevention of catastrophic events.” The Report also noted that critical control management was a pathway for moving industry towards adoption of HRO theory.

Source	Evidence
Brady Review	<p><i>Recommendation 2</i> - 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.</p> <p><i>Recommendation 5</i> - 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.</p> <p><i>Recommendation 6</i> - The industry should adopt the principles of High Reliability Organisation theory in order to reduce the rate of serious accidents and fatalities. At its most fundamental level, High Reliability Organisation theory focuses on identifying the incidents that are the precursors to larger failures and uses this information to prevent these failures occurring. Adopting a High Reliability Organisation approach will require the refinement or addition of specific competencies to both the mining industry and the Regulator.</p>
BoI Report, Part I	<p><i>Finding 15</i> - Critical controls associated with principal hazard management plans should be monitored and reported on by the Inspectorate. Such monitoring and reporting on critical controls would include those associated with the gas principal hazard management plan.</p> <p><i>Recommendation 6</i> - 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.</p> <p><i>Finding 78</i> - The effective implementation of Critical Control Management (CCM) will move the industry towards adopting the principles of HRO theory, the desirability of which was recognised in the Brady Review and by Mr Mark Stone, Chief Executive of RSHQ, in his evidence.</p> <p><i>Recommendation 19</i> - RSHQ takes steps to amend the Act and Regulation to require a coal mine to develop a set of critical controls with performance criteria</p>

	<p>which must be incorporated into Principal Hazard Management Plans (PHMPs), and which require:</p> <ul 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. <p><i>Recommendation 20</i> - 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.</p> <p><i>Recommendation 21</i> - RSHQ audits the effectiveness and implementation of critical controls associated with a mine’s PHMPs at regular intervals, and publishes the results of these audits in its Annual Safety Performance and Health Report.</p>
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Objective of government action

The key objective is to ensure critical controls are clearly incorporated as a component in the overall SHMS for all coal mines, and metalliferous mines and quarries, so that there is a clear focus on critical controls and their effectiveness.

A secondary objective is to ensure critical control failures are effectively communicated to the inspectorate and to senior officers of the corporation and that such failures require the SSE to suspend operations until the controls are made effective.

Options

Option 1 – Amend legislation

Option 1 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 operators would be required to ensure that critical controls are effectively identified,

implemented, and monitored for effectiveness. The requirements for critical controls will be enforceable under the Mining Safety Acts.

The identification and mandating of critical controls will assist SSEs and coal/metalliferous mine or quarry operators to satisfy their high-level safety and health obligations under the relevant legislation. These obligations include developing and implementing a SHMS which includes mandatory requirements such as principal hazard management plans, and any additional risk controls assessed as required at a particular coal mine. Coal mine operators also have high level safety and health obligations, including to review the effectiveness of the SHMS to ensure risk to persons from coal mining operations is at an acceptable level.

The proposed approach to require the identification of critical controls will clarify how mine operators and SSEs should ensure the effectiveness of the SHMS regarding controls considered of critical importance, and ensure they satisfy their current safety and health obligations. Requiring all coal mine operators to implement critical controls potentially adds to the effectiveness and comprehensiveness of the current risk management framework under the Mining Safety laws. It would be a new component to add to the refinement of mandatory risk management and risk controls to facilitate improvements.

While some critical controls may be prescribed, it would be the obligation of SSEs and coal mine operators to identify all other critical controls, and how the relevant critical controls apply to the hazards and risks of their particular coal mining operations. Similarly, the above also applies for SSEs and metalliferous mine/quarry operators, other than in relation to principal hazard management plans.

Over time, this will help to improve how the mining industry identifies and controls hazards, and how they respond when controls are ineffective. There is also potential for significantly improving principal hazard management plans and risk management at coal mines if the requirement for critical controls is implemented across the industry. A requirement may be that principal hazard management plans include critical controls within those plans. Principal hazard management plans do not currently have a clear link to critical controls. There may be related revisions to the list of principal hazards under the CMSHR to support this.

It would be up to the mine operator and those at a mine to identify critical controls focused on elimination or engineering controls. Identification of critical controls could significantly improve risk management at metalliferous mines, and quarries. A worker in a safety critical position at a mine could be assigned responsibility to monitor the effectiveness of critical controls. An SSE for a coal mine could be required to review and audit the effectiveness of principal hazard management plans and associated critical controls annually.

It is envisaged the legislation would describe the process to identify the critical controls, and the method by which the effectiveness of controls would be measured and monitored. The critical controls process could be based upon the ICMM guide process. The definition of critical control in the ICMM guide could also be used. As well as identifying critical controls, the ICMM guide includes how to assess their adequacy, assigning accountability for the implementation, verifying the effectiveness of critical controls in practice, and responding to inadequate performance. Similar accountability and review processes are already implicit in the CMSHA and MQSHA through high level safety and health obligations, and are sometimes more explicitly addressed, (for example in the CMSHA, section 64H(1)(c)).

Critical controls may be preventive (they prevent unwanted events); or mitigating (they mitigate the impacts of an unwanted event after it has occurred).

Examples of preventive controls include:

- mobile equipment brakes – where there is a fault in the braking system that would result in the brakes failing, and the design of the brake system is such that the failure will cause the brakes to apply and the mobile equipment to stop;
- shielding hot equipment components to prevent a fire in the event of oil coming into contact with hot components;
- interlocking methane monitors and electrical equipment in an underground coal mine.

Examples of mitigating controls include:

- bunding and windrows to ensure out of control vehicles cannot leave;
- automatic fire suppression on mobile equipment that activates in the event of a fire.

If both preventive and mitigating critical controls for an identified critical risk fail, the inspectorate would be notified, as this failure would be an HPI. It is proposed that SSEs also be required to notify senior officers of the corporation of the failure in line with HRO principles. It is also proposed that such a failure would be a trigger for the SSE to suspend operations until the controls are effective. This essentially relates to their obligations under the Mining Safety Acts (refer CMSHA, section 42 and MQSHA, section 39) for which there are penalties for failing to discharge an obligation (refer CMSHA, section 34 and MQSHA, section 31). The inspectorate could also suspend operations under existing directives powers until the critical control has

been reviewed and effectiveness of controls are established. Enforcement would be in accordance with the RSHQ Compliance and Enforcement Policy²⁵ framework.

Impacts and benefits

Costs	Benefits
<p>An improved focus on critical controls is not expected to entail significant costs for any stakeholders. The risk management and review components that will be involved with critical controls is consistent with current statutory requirements to review and ensure the effectiveness of the SHMS, so would be consistent with existing ongoing SHMS costs.</p>	<p>Obligation holders at coal mines, metalliferous mines, and quarries, including operators and SSEs, already have high level safety and health obligations to manage hazards and risks through the SHMS. The proposed requirement for critical controls will help to ensure that they discharge their safety and health obligations effectively, and that serious accidents (including fatalities) are prevented.</p>
<p>There may be some implementation costs for operators who are not already considering critical controls as part of their SHMS. However, any additional costs are expected to be minimal as they are related to obligations that already exist through requirements for an effective SHMS.</p> <p>An additional explicit requirement to halt work is proposed, but existing mechanisms in the Act would already have a similar effect. For example, the failure of a critical control would likely result in an unacceptable level of risk which requires persons be evacuated to a safe location and action be taken to reduce the risk to an acceptable level (refer CMSHA, s.31 and MQSHA, s.28). Also, directives can already be used to suspend operations (refer CMSHA, s.167 and s.169 and MQSHA, s.164 and s.166).</p>	<p>No additional high-level safety and health obligations are imposed. The proposal will clarify how coal mine operators, metalliferous mine, or quarry operators, and SSEs should ensure the effectiveness of the SHMS regarding controls considered of critical importance, and ensure they satisfy their current safety and health obligations.</p>
	<p>The potential benefits are significant, particularly if the number of serious accidents (which includes lives lost) is reduced over time. Additionally, a mine would stand to lose significant income from its temporary closure, following a serious accident (which could include a death of a worker), as an</p>

²⁵ RSHQ Compliance and Enforcement Policy available at <https://www.publications.qld.gov.au/dataset/compliance-and-enforcement-policy/resource/1c401021-3f6c-4adb-a1d4-ef3e64727442>.

	<p>investigation occurs. Furthermore, if there was an underground coal mining disaster or other serious accident there may also be sterilisation (permanent loss) of coal resources as a result. There may also be significant costs associated with prosecutions following a fatality. Successful implementation of critical controls would help to ensure mines meet existing obligations to protect workers and avoid these flow-on costs</p>
	<p>Using critical controls, in addition to other elements of a SHMS, enhances clarity of current requirements to develop and implement an effective SHMS. Critical controls could also be incorporated as part of current requirements to review the effectiveness of the SHMS.</p>

Option 2 – Status quo (do nothing)

Option 2 maintains the status quo and will not provide clear minimum legislative requirements relating to critical controls. It ignores expert recommendations and instead continues the reliance on existing provisions of the Mining Safety laws, which have not been sufficient to drive the necessary safety improvements. This option does not address the objectives of the government action nor the recommendations of the Brady Review or the Bol (which the government has already committed to implementing).

Maintaining the status quo will not yield any safety improvements for workers or the community. It is also likely that the current fatality and serious accident cyclical rates will remain.

Option 3 – Non-regulatory option

Option 3 proposes that RSHQ provides information to mine and quarry operators on how to improve safety and health outcomes. This would focus on the need for industry to implement critical controls and to identify precursors to fatalities and better use these to prevent accidents and fatalities. This option would rely on industry and workers voluntarily accessing and implementing the information. It would be supported by the inspection, audit and compliance program of the regulator and be funded from RSHQ’s operating budget. However, priority would be given to core inspectorate functions, such as responding to and investigating serious accidents and fatalities if these occur.

Option 3 would ignore expert recommendations and fail to remedy identified issues with the legislative framework relating to critical controls. While some improvements to the current understanding and implementation of critical control management could be expected, this voluntary approach is unlikely to yield any significant positive impacts. This option does not address the objectives of the government action nor the recommendations of the Brady Review or the BoI (which the government has already committed to implementing).

Impacts and benefits

Costs	Benefits
There may be some implementation costs for operators who are not already considering critical controls as part of their SHMS and subsequently choose to do so. However, any additional costs are expected to be minimal as they are related to obligations that already exist through requirements for having an effective SHMS.	No legislative amendment required.
Current fatality and serious accident cyclical rates expected to continue as there are no anticipated significant safety improvements for workers or the community.	
Minimal increase in safety at Queensland mines and quarries envisaged, meaning the costs associated with serious accidents and fatalities are largely likely to continue.	

Recommended option

The recommended option is Option 1, under which it is proposed to amend the Mining Safety laws to require critical controls to be a component in the SHMS for all Queensland mines and quarries. This would include minimum requirements for the identification and monitoring of critical controls, as well as notification in the event of a failure of a critical control and to suspend operations until the controls are made effective. Implementing requirements for critical controls will improve understanding and implementation of current risk management processes, and associated risk controls. Highlighting critical controls as part of the current risk management processes and SHMS will refine and improve current risk management requirements. Providing clarity to obligation-holders reduces subjectivity about the standard required to meet obligations for the purposes of compliance. This may reduce costs associated with legal proceedings by reducing the scope of issues in contention.

Requiring critical controls is expected to be a significant measure in preventing future avoidable serious accidents including deaths of mine workers. The proposed legislative amendments under Option 1 would also assist in ensuring that critical controls are sufficiently understood and appropriately implemented, rather than allowing voluntary, confusing, or less understood critical controls at some coal mines (as noted in the BoI Report) as would be the case under Options 2 and 3. By providing minimum requirements, compliance activities (e.g. auditing) could also be used to gauge understanding and provide further assistance to facilitate improvements (i.e. by providing advice or using a directive). Whilst Option 3 is more attractive than Option 2 and would be supported by an educative approach; both Options 2 and 3 are not seen as viable because they do not achieve the objectives of government action in the CRIS and would not yield sufficient safety improvements to reduce the rates of serious accidents and fatalities.

The proposed requirement for critical controls under Option 1 will help to ensure that the existing high-level safety and health obligations are discharged effectively and that fatalities are prevented. A clearer focus on the effectiveness of risk controls and requirements for critical controls could potentially improve what is already required under the safety and health obligations. . Consequently, there are no additional obligations, but instead a focus on the effectiveness of existing risk management processes to satisfy existing safety and health obligations.

Consultation questions

HAVE YOUR SAY	
QUESTION 1:	What impact will the proposed critical control requirements have on clarity, confidence and consistency regarding application of controls in risk management?
<i>Have your say using the submission template</i>	

Competency for key critical safety roles

Issue

The statutory mine safety position holders have particular obligations, responsibilities or accountabilities within the integrated system of safety and health management. They are in positions that have a major influence on safety at a mine. Tables 5 and 6 (towards the end of this topic) summarise the main safety and health obligations of those in particular safety critical positions at coal mines which don't currently have certificate of competency requirements. The CMSHA requires the SSE to determine the competencies of those in the management structure;

however, there is no formal requirement for the assessment of competency with respect to the mechanical, electrical and surface managerial roles.

Problems with the competency of some persons appointed to key safety and statutory roles, which have a major influence on the safety of a mine, are continuing at some Queensland mines. This is particularly evident in relation to engineering manager and surface mine manager roles. For instance, of the nine fatalities in the Queensland coal industry in the past four years (since 1 July 2018) six have been related to mechanical engineering activities undertaken under the responsibility of the mechanical engineering manager, both in a surface and underground context; and two fatalities were associated with work related to the surface mine manager. There is currently no legislative requirement for the assessment of competency by the BoE, or other regulatory body, to independently evaluate the competency of persons fulfilling these critical safety roles, including mechanical engineering managers and surface mine managers. Inadequate competency and supervision by those in these safety critical roles were factors involved in these tragic fatalities.

Industry has had over 20 years to properly implement its own competency standards and ensure safety critical roles are filled by competent people. However, some operators have failed to do so, despite repeated warnings from the inspectorate, including the issuing of directives to comply with the legislation. In addition, over the past 12 years, there have been some incidents of arguably blurred responsibilities at underground coal mines, where underground mine managers (UMMs) have not been perceived [in practice] to have management and control of the mine as required by legislation.

Mutual recognition arrangements for statutory certificates of competency between NSW and Queensland also further highlight the issue of the current lower standards for some statutory roles in the Queensland coal mining industry; specifically in relation to surface mine manager, mechanical engineering manager and electrical engineering manager roles, for which certificates of competency are required in NSW but not in Queensland.

Background to proposals about additional certificates of competency

Mine workers in key safety roles, including statutory positions, need to have the appropriate skills and knowledge to perform their duties. This includes having the competencies required for coal mining statutory positions as determined by the CSMHAC. For key statutory positions, the required competencies for key positions also include a certificate of competency or a notice issued by the BoE. These require passing a written law exam, and in the case of a certificate of competency, also passing an oral exam. Both assessment processes are administered by the BoE.

The BoE grants certificates of competency to applicants who demonstrate the appropriate level of competency. Current certificates of competency for coal mining are: first class underground mine manager, second class (undermanager), deputy, ventilation officer, and open cut examiner. SSE notices are also issued by the BoE.

Prior to commencement of the current Mining Safety Acts in March 2001, Queensland had broader certificate of competency requirements in relation to surface mine manager, mechanical engineering manager and electrical engineering manager roles. The rationalisation of certificate of competency requirements in Queensland in 2001 was expected to see industry implement its own competency standards and ensure safety critical roles were filled by competent people; however, this did not occur. In contrast, NSW has had certificates of competency for these positions in place for approximately 40 years. In terms of safety performance, the NSW coal mining industry has only had one fatality over the past four years, compared to the nine that have unfortunately occurred in Queensland during the same period.

Not all key safety critical roles that are responsible for essential risk management in mining safety legislation are currently required to hold a certificate of competency. Consequently, there is also a need to consider current certificate of competency requirements, and how additional proposed certificate of competencies would provide improved health and safety outcomes e.g., a certificate of competency for surface coal mine managers, surface coal mine mechanical engineering managers, underground coal mine mechanical engineering managers, and electrical engineering managers.

Current requirements for SSEs at coal mines

An SSE for a coal mine is the most senior officer at a coal mine who has significant responsibilities in relation to the safety and health of persons who may be affected by coal mining operations. Currently, an SSE need only hold an SSE notice issued by the BoE and is not required to hold a certificate of competency.

A certificate of competency is issued based on the demonstration of extensive technical competency and years of practical experience; together with demonstrated knowledge and application of sound risk management practice and mining safety legislation. An SSE notice requires risk management competency, together with knowledge of the mining safety legislation, but not necessarily practical application of the knowledge.

The risk profile of an underground coal mine differs significantly to that of a surface mine, due to the presence of methane hazards. This is why a UMM (a position only required for underground mines) must hold a first class certificate of competency; and is the rationale for the proposal that SSEs at underground mines be required to hold a certificate of competency.

Qualifications of those left in charge during absences

The statutory positions of SSE, and for underground mines, UMM are the most senior safety and health officers in the management structure at a mine, and have greater overall control and management, than other statutory position holders.

A UMM is required to have a first class certificate of competency for an underground coal mine. However, the person left in charge of an underground mine in the absence of an UMM only needs to hold a deputy's certificate of competency.

The potential consequences from a catastrophic failure in underground coal mining negates the suggestion that this is reasonable on the basis that a deputy may only occupy the UMM position for short periods of time. Catastrophic situations can arise quickly and sometimes without prior warning. The deputy is stepping into the role generally for a period of between 12 hours and three days (being the weekend when the UMM leaves the site Friday midday and does not get back until Monday midday in several cases) and longer periods when the UMM is on extended leave. The legislation provides for, but currently does not require, the SSE to appoint a first or second class certificate holder.

A deputy is usually operating at a supervisor level on a single team, not a manager of multiple disciplines and technical requirements as required by the UMM role. A deputy's skills and knowledge is at that lower supervisory level, not across multiple technical and operational disciplines. Also, the skills and knowledge that a deputy might be lacking over a first or second class certificate holder may be crucial in relation to preventing or responding to an accident.

The absence of the UMM and those with lesser qualifications covering for the UMM was a factor present in two recent deaths of workers.

Having personnel at underground coal mines who do not hold the highest relevant competencies undertake key safety roles such as SSE and UMM in the absence of the substantive occupant of those positions means the safety and health competence and protections in such situations are potentially diminished.

Rationale for government action

It is crucial that interventions occur at the earliest stage possible so that risks arising from a lack of competency in roles having a major influence on safety are managed. Over the past four years, eight of the nine fatalities at Queensland coal mines were related to work overseen by electrical engineering managers, mechanical engineering managers and surface coal mine managers. By comparison in NSW, where persons in those roles are required to hold a

certificate of competency, there have been no similar fatalities at NSW coal mines during that time.

The BoI made findings and recommendations about SSEs and UMMs at underground coal mines, including about the qualifications of those left in charge during absences. The findings and recommendations of the BoI were made after hearing evidence from various mining industry experts.

The BoI recommended legislative amendments to ensure:

- An SSE for an underground coal mine must be the holder of a first class certificate of competency.
- A person left in charge of an underground coal mine in the absence of an UMM must hold a first or second class certificate of competency.
- A person appointed to act as an 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.
- A transitional period for implementation of the above changes is provided, to avoid any disruption to mining sites while these certificates of competencies are obtained.

In the past there have also been incidents of arguably blurred responsibilities at underground coal mines where UMMs have not been seen (in practice) to have the necessary management and control of the mine. Instead, less technically qualified individuals who are more senior in the management of the mining company (e.g., the SSE) have been seen to have control and management, with the UMM relegated to a less influential subordinate compliance role.

Recommendations of the Brady Review

The Brady Review also made a number of findings and recommendations relating to the importance of competency through training and supervision of workers. These findings also relate to the competency of those in safety critical positions at mines, especially those in safety critical positions requiring certificates of competency from the BoE.

Factors like the size and power of mechanical equipment at a mine, the complexity and risks associated with underground electrical installations, and the maintenance requirements for each, highlight the importance of appropriate mechanical and electrical engineering managers. Mechanical engineering manager (for surface and underground), and electrical engineering manager (for underground) certifications are needed to ensure there are managers with technical competencies, critical for the control of mechanical or electrical hazards or risks, and that their competence has been independently assessed by the BoE.

Views expressed at regular electrical engineering manager and mechanical engineering manager forums indicate that persons from industry in those roles support a certificate of competency being introduced in Queensland, similar to that of their peers in NSW. The establishment of such roles as statutory roles requiring a certificate of competency will also further deter SSEs directing persons to undertake certain activities associated with these roles when they have not been assessed as competent.

There is also a need to require a certificate of competency for coal surface mine managers, based on the tragic loss of lives and numbers of serious incidents at surface coal mines. This will bring Queensland into line with similar certificate of competency requirements for surface mine managers, as well as electrical and mechanical engineering managers in NSW.

Source	Evidence
Brady Review	<p><i>Recommendation 2</i> - 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.</p> <p><i>Recommendation 3</i> - The industry needs to focus on ensuring workers are appropriately trained for the specific tasks they are undertaking.</p> <p><i>Recommendation 4</i> - The industry needs to focus on ensuring workers are appropriately supervised for the tasks they are undertaking.</p> <p><i>Recommendation 6</i> - The industry should adopt the principles of High Reliability Organisation theory to reduce the rate of Serious Accidents and fatalities. At its most fundamental level, High Reliability Organisation theory focuses on identifying the incidents that are the precursors to larger failures and uses this information to prevent these failures occurring. Adopting a High Reliability Organisation approach will require the refinement or addition of specific competencies to both the mining industry and the Regulator.</p>
Bol Report, Part I	<p><i>Finding 68</i> - The person appointed to have control and management of an underground coal mine must hold a First Class Certificate of Competency.</p> <p><i>Finding 69</i> - It is unsatisfactory that a person appointed to have control and management of an underground coal mine in the UMM's absence holds less than a Second Class Certificate of Competency.</p> <p><i>Finding 70</i> - An SSE for an underground coal mine ought to hold a First Class Certificate of Competency.</p>

	<p><i>Finding 71</i> - A person appointed to act as the SSE during an SSE's absence of more than 14 days ought to hold a First or Second Class Certificate of Competency.</p> <p><i>Finding 73</i> - Implementation of legislative requirements giving effect to these findings would need to be transitional to avoid disruption to mining sites.</p> <p><i>Recommendation 13</i> - 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.</p> <p><i>Recommendation 14</i> - 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.</p> <p><i>Recommendation 15</i> - 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.</p>
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Objective of government action

The key objective is that key safety critical positions have the appropriate competencies, understand critical mining principles and procedures, and are assessed as competent to fulfil the requirements of the relevant position.

A secondary objective is to ensure persons acting in key statutory positions function effectively in the role while the incumbent is absent.

Options

Additional certificates of competency for coal mine workers in Queensland undertaking safety critical statutory safety roles would ensure that persons in these roles have sufficient experience and expertise, as determined by the BoE, and would improve safety and health outcomes (including a reduction in the fatalities at Queensland coal mines). It would also provide additional assurance that those in these safety critical roles are competent. It would better align with the equivalent certificate of competency requirements under NSW mining health and safety legislation.

This approach will enable the Mines Inspectorate's regulatory intervention to occur at the earliest stage possible in relation to these additional safety critical roles if certificates of competency are required.

Option 1 – Amend legislation

Option 1 proposes legislative amendments to the CMSHA to require the following certificates of competency for key safety critical roles to strengthen the oversight of competency:

Underground coal mines

- An SSE for an underground coal mine must be the holder of a first class underground mine manager certificate of competency.
- An electrical engineering manager must be the holder of an electrical engineering manager certificate of competency (underground coal mines).
- A mechanical engineering manager must be the holder of a mechanical engineering manager certificate of competency (underground coal mines).

Surface coal mines

- A surface mine manager must be the holder of a surface mine manager certificate of competency.
- A mechanical engineering manager must be the holder of a mechanical engineering manager certificate of competency (surface coal mines).

Option 1 also proposes legislative amendments to the CMSHA to require persons left in charge of a mine to also hold a similar certificate of competency to the incumbent. Specifically, to require:

- A person appointed to act as an 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.
- A person left in charge of an underground coal mine in the absence of an UMM must hold a first or second class certificate 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. The size and power of mechanical equipment at a mine and the associated maintenance requirements highlight the importance of a mechanical engineering manager. The mechanical engineering manager and electrical engineering manager certifications would ensure there are managers with technical competencies critical for the control of mechanical or electrical hazards or risks.

Requiring a surface coal mine manager to also have a certificate of competency would be

consistent with the Bol's reasoning about the importance of underground coal mine managers holding a first class certificate of competency, and the recommendation that an underground coal mine manager first class certificate of competency also be held by the SSE. (As the Bol was concerned with an underground coal mine incident, it did not consider surface coal mine arrangements).

Stakeholders should also consider whether surface coal mine SSEs should also be required to hold a surface mine manager certificate of competency, as this would also be consistent with the Bol recommendation for underground coal mine SSEs.

Requiring a surface electrical engineering manager to have a certificate of competency would be consistent with the proposal for an underground electrical engineering manager to have a certificate of competency. This responds to recently raised support among electrical engineers for this proposal. It is also the expert opinion of coal mining inspectors that requiring electrical engineering managers to have a certificate of competency will improve safety. Electrical shocks and electrical HPIs continue to prominently occur among HPIs. Electrical HPIs could have resulted in fatalities.

Surface electrical engineering managers holding certificates of competency can reduce electrical serious incidents, and the potential for fatalities from electrical incidents. Surface electrical engineering managers are also among the safety critical positions that are tasked to oversee electrical critical controls implemented by a surface coal mine. Consequently, they are among those responsible at the frontline of safety and health at a surface coal mine, being accountable for providing oversight of the management of hazards, risks and critical controls. It is crucial that they are competent. Section 18 of the CMSHR sets out the safety critical nature of the position as it states:

“The duties of an electrical engineering manager include controlling and managing the following at the mine—

- (a) the design of electrical installations;*
- (b) the installation and maintenance of electrical equipment and electrical installations;*
- (c) electrical work;*
- (d) work carried out close to electrical installations.”*

Stakeholders should therefore also consider and indicate in their responses whether a surface electrical engineering manager should be required to hold an electrical engineering manager certificate of competency.

While this proposal has not been included in the cost benefit analysis in Appendix 2, the cost benefit analysis corresponds to half of that for a surface mechanical engineering manager certificate of competency included at Appendix 2. The addition of the electrical engineering manager certificate of competency would approximately cost an additional \$82 221 (equivalent annual value). Stakeholder feedback about safety benefits compared to costs will influence how this proposal is included in the decision RIS cost benefit analysis.

The proposed additional certificates of competency will increase consistency with certificate of competency requirements at coal mines in NSW, and improve safety. Safety benefits are modelled in the cost benefit analysis in Appendix 2. The cost benefit analysis is summarised below.

The introduction of certificates of competency for some existing critical safety positions will require a reasonable period of time to implement. It is proposed that a three-year transition period will provide sufficient time for workers to prepare for and undergo the required BoE examinations. Feedback from stakeholders about the proposed three-year transitional periods is encouraged.

If the applicant for a certificate of competency is already appointed in line with existing legislative requirements (e.g., they have required competencies, tertiary qualifications, experience, etc.), they should be well positioned to pass the requirements of the BoE for a certificate of competency. All that will be required is the successful completion of a written examination in legislative knowledge and understanding and an interview with a panel of three peers (two of whom are from industry, the third being an inspector), who will question the applicant on the competency modules required to hold the safety critical position.

The interview with the panel of peers covers practical scenarios including the management of principal hazards and catastrophic incidents. Applicants need to prove to their industry peers that they can competently practically manage the scenarios should they eventuate.

Any persons already holding an equivalent NSW certificate of competency could apply to have their NSW competency recognised in Queensland (refer Appendix 4 for examples of potentially equivalent interstate certificates of competency under mutual recognition).

Impacts and benefits

Costs	Benefits
\$3.9 million as a present value ²⁶ (\$597,968 as an equivalent annual value) across all mining industry in Queensland	<p>Refer to cost benefit analysis at Appendix 2 and the below summary for information about expected safety benefits.</p> <p>Will ensure the competency of persons in additional safety critical positions through additional certificates of competency.</p>
Refer to the cost benefit analysis at Appendix 2 and the below summary for further information.	Will ensure the competency of persons temporarily acting in key statutory positions through similar certificate of competency requirements.

Summary from cost benefit analysis at Appendix 2

The cost associated with the new statutory positions (certificates of competency for surface mine managers, surface mechanical engineering managers, underground electrical engineering managers, underground mechanical engineering managers and SSEs for underground mines which will be performed by existing staff with new certifications) is \$3.9 million as a present value²⁷ (\$597,968 as an equivalent annual value) across all mining industry in Queensland. Underground coal represents 45 per cent of costs, and surface coal 55 per cent, with half of the surface coal costs associated with the surface mechanical engineering manager certificate of competency (i.e., approximately \$164,441 as an equivalent annual value).

The benefits of the amendments are to improve safety and health in Queensland mines. The benefits of all proposed additional certificates of competency are supported by the expert opinion of inspectors and many of those already in existing positions at coal mines who have recently indicated support for the extra certification of competency by the BOE. The underground coal SSE having a first class certificate of competency as a mine manager was also reflected in recommendations of the BoI based on the incidents it analysed, expert evidence, including from industry and inspectors.

Due to uncertainty with key variables around baseline disaster risk, and the likely reduction in disasters and injury reductions, these have not been incorporated into a net present value calculation. However, an illustrative quantification was carried out to illuminate the potential

²⁶ **Present value** is the total value of the future benefit stream (10 years) in present day terms - this allows costs and benefits to be compared at the point where decisions are made.

²⁷ **Present value** is the total value of the future benefit stream (10 years) in present day terms - this allows costs and benefits to be compared at the point where decisions are made.

benefits relative to costs. The figures here are based on the best estimates of expert staff in RSHQ. Given a one-year period with no benefits, and a subsequent three-year transition period where only half the benefits are assumed to eventuate, some indicative values are:

- There would be a fall in injuries due to proposed amendments for existing safety critical roles now required to have a statutory certificate of competency. If this reduction in injuries was one per cent for the three-year transition period, and two per cent each year after, the benefits would be \$786,708 a year for the main period after transition.
- If there was a reduction in fatalities of five per cent, the annual value (not discounted) for the main period after transition would be \$612,000.
- There would be a reduction in the risk of an underground coal mining disaster due to the proposals. This reduction in disaster risk would not only help avoid fatalities that carry high social costs, but also reduce the risk of mine closure and sterilisation (permanent loss) of coal resources as a result of an explosion. There is not sufficient information available on the baseline risk of an underground coal disaster and other key factors in Queensland to model these risks adequately. However, an exploratory quantification was carried out to illustrate the potential benefits. If there is a baseline disaster risk of five per cent per year, and this risk falls by 20 per cent as a result of the proposed changes, the benefits in reduced lost production and coal sterilisation would be \$11.2 million a year for the main period after transition.
- Overall, this benefit scenario results in present value of \$65.7 million or an annual equivalent value of \$10.1 million a year. These far outweigh the costs - i.e., \$3.9 million as a present value²⁸ (\$597,968 as an equivalent annual value).

A proposal for 16 additional certificates of competency was included in the 2013 Consultation RIS. However, these did not progress, other than in relation to ventilation officers, for whom the certificate of competency requirement commenced on 11 November 2019, with a three-year transitional period. While the proposal under Option 1 for five additional certificates of competency is different to the former 2013 proposal, a summary of stakeholder concerns relating to the 2013 proposal is provided at Attachment 2.

²⁸ **Present value** is the total value of the future benefit stream (10 years) in present day terms - this allows costs and benefits to be compared at the point where decisions are made.

Option 2 – Status quo (do nothing)

This option maintains the status quo and so will not provide a legislative solution to ensure additional competency assessment by the BoE for five additional key safety critical positions at Queensland coal mines. Whilst this option is cost neutral it does not strengthen competency requirements for persons acting in the key SSE and UMM statutory positions to ensure they can function effectively during an absence of the incumbent, and does not improve safety.

There are no other options that have been identified that could address this problem.

Recommended option

The recommended option is Option 1, under which it is proposed to amend the CMSHA to include requirements for the following additional certificates of competency: underground coal SSE having a first class certificate of competency, underground electrical engineering manager certificate of competency, underground mechanical engineering manager certificate of competency, surface mine manager certificate of competency, surface mechanical engineering manager certificate of competency. CMSHA amendments proposed under Option 1 would also require a person appointed to act as an SSE for an underground coal mine, during an SSE's absence of more than 14 days, to hold a first or second class certificate of competency; and require a person left in charge of an underground coal mine when the UMM is absent to hold a first or second class certificate of competency.

Option 1 provides a proactive and effective approach to take action at the training and certification level which will assist industry to ensure competency of those persons appointed to, and acting in, safety critical positions. The status quo under Option 2 is reliant on industry taking the initiative to ensure their safety critical workers are competent, with the Inspectorate issuing directives to comply with the legislation where industry fails to do so. The continuing appointment of persons in the identified critical safety roles without any determination of competency by an independent body (as outlined under Option 1), is likely to result in ongoing fatalities in Queensland.

A legislative approach is therefore needed, given that after 20 years of the current CMSHA framework, there are still some Queensland coal mine operators that have failed to ensure appropriate competency standards and fill safety critical roles by competent people. Option 1 also needs to be considered against the backdrop of a mine continuing to be exposed to risk without key competent persons, or in extreme cases requiring that a mine suspend production which can cost a mine several million dollars (or more) per day, in lost production.

Making some additional existing safety critical positions require a certificate of competency is essentially related to additional training and certification requirements. It will not only standardise competency requirements for these roles and provide clarity for compliance, but it will also provide greater assurance to operators and SSEs who are directly responsible for ensuring those in these safety critical positions have appropriate competencies.

Table 5 – Summary of key safety and health obligations of those in particular safety critical positions at underground coal mines which do not currently have certificate of competency requirements

Statutory position	Function performed by the person appointed to the statutory position	Key statutory obligations/responsibilities
Site senior executive (SSE)	Development and implementation of the SHMS to be followed by all at a mine.	<p>Most senior officer at the mine in charge of resources (logistical and commercial) and safety and health, responsible to the mine operator.</p> <p>In addition to the development and implementation of the SHMS to be followed by all at a mine, responsibilities reflect overall authority and control over the coal mine workers, including contractors, and all the activities at the mine through:</p> <ul style="list-style-type: none"> • developing and maintaining a management structure that assists with the development and implementation of the single SHMS including ensuring that there are particular technical competencies among those carrying out safety critical work and that there is adequate supervision and control of operations on each shift and pre-shift inspections and other regular monitoring of the work environment, procedures, equipment and installations at the mine • being responsible for workers being trained to be competent to undertake the tasks assigned to them at the mine • assigning tasks to statutory position holders and other non-specific positions, such as supervisors, only when they are competent to perform the task assigned. <p>Also, numerous more specific responsibilities under the CMSHR as they relate to an underground mine e.g., ensuring the design, installation and</p>

		<p>maintenance of electrical equipment and installations are safe.</p>
<p>Underground mine manager (UMM)</p>	<p>To control and manage activities at the mine both on the surface and underground.</p>	<p>Provides directions in relation to the health, safety, technical control, and management of the mining activities.</p> <p>Controls and manages the overall implementation of the SHMS so that all hazards and risks are effectively controlled as they relate to the activities at the mine.</p> <p>Authorises all persons entering the mine.</p> <p>Controls and manages the overall monitoring of the effectiveness of the SHMS and oversees the competence of workers.</p> <p>Appoints a person who has a defined certificate of competency to control activities in 1 or more explosion risk zones.</p> <p>Appoints competent persons to control and manage mechanical and electrical activities of the mine.</p> <p>Also, numerous more specific responsibilities under the CMSHR.</p>
<p>Electrical engineering manager</p>	<p>To control and manage the electrical engineering activities and standards at the mine (under the direction of the UMM or in line with the management structure at the mine).</p>	<p>Responsibilities include the operation of all electrical energy sources, particularly flame proof and intrinsically safe equipment as used in explosion risk zones.</p> <p>Responsibilities are based on relevant qualifications to technically manage electrical hazards and risks.</p> <p>Assists more senior statutory positions to monitor implementation of the electrical engineering critical control plan.</p> <p>Provides advice to more senior statutory positions (SSE and UMM) in relation to the design, selection, operation and maintenance of electrical systems.</p> <p>Reports logistically to the SSE or maintenance manager, and to the UMM on all matters relating to the safety and health of workers at the mine.</p>

<p>Mechanical engineering manager</p>	<p>To control and manage the mechanical engineering activities and standards at the mine (under the direction of the UMM or in line with the management structure at the mine).</p>	<p>Responsibilities relate to the safe operation and maintenance of mechanical equipment.</p> <p>Responsibilities are based on relevant qualifications to technically manage mechanical energy hazards and risks associated with, for example, the size and power of mechanical equipment.</p> <p>Assists more senior statutory positions with monitoring the implementation of the mechanical engineering critical control plan.</p> <p>Provides advice to more senior statutory positions (SSE and UMM) in relation to the selection, operation and maintenance of mechanical systems.</p> <p>Reports logistically to the SSE or maintenance manager and to the UMM on all matters relating to the safety and health of workers at the mine.</p>
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Table 6 - Summary of key safety and health obligations of those in particular safety critical positions at surface coal mines which do not currently have certificate of competency requirements

Statutory position	Function performed by the person appointed to the statutory position	Key statutory obligations/responsibilities
Site senior executive (SSE)	Development and implementation of the SHMS to be followed by all at a mine.	<p>Most senior officer at the mine in charge of resources (logistical and commercial) and safety and health, responsible to the mine operator.</p> <p>In addition to the development and implementation of the SHMS to be followed by all at a mine, responsibilities reflect overall authority and control over coal mine workers, including contractors, through:</p> <ul style="list-style-type: none"> • developing and maintaining a management structure that assists with the development and implementation of the single SHMS, ensuring that there are particular technical competencies among those carrying out safety critical work and that there is adequate supervision and control of operations on each shift and pre-shift inspection and other regular monitoring of the work environment, procedures, equipment and installations at the mine • being responsible for workers being trained to be competent to undertake the tasks they are assigned • assigning tasks to statutory position holders and other non-specific positions, such as supervisors, only when they are competent to perform the task assigned • appointing persons holding appropriate competencies to statutory positions – specifically open cut examiner’s certificate of competency to carry out responsibilities and duties prescribed by the CMSHR. <p>Also, numerous more specific responsibilities under the CMSHR for surface coal mines.</p>
Surface mine manager	To control and manage mining	Provides technical, health and safety directions in relation to the technical control and management of mining activities (those mining activities prescribed

	activities at the mine.	<p>in the CMSHR) based on practical and theoretical knowledge.</p> <p>Controls and manages the overall implementation of the SHMS so that all hazards and risks associated with 'mining activities' are effectively controlled.</p> <p>Controls and manages the overall monitoring of the effectiveness of the SHMS and oversees the competence of workers.</p> <p>Also has specific responsibilities under the CMSHR.</p>
Electrical engineering manager	To control and manage the electrical engineering activities and standards at the mine.	<p>Responsibilities are based on relevant qualifications to technically manage electrical hazards and risks.</p> <p>Assists more senior statutory positions with monitoring the implementation of the electrical engineering critical control plan.</p> <p>Provides advice to more senior statutory positions (SSE and surface mine manager) in relation to the design, selection, operation and maintenance of electrical systems.</p> <p>Reports logistically to the SSE and technically to the surface mine manager.</p>
Mechanical engineering manager	To control and manage the mechanical engineering activities and standards at the mine.	<p>Responsibilities relate to the safe operation and maintenance of mechanical equipment.</p> <p>Responsibilities are based on relevant qualifications to technically manage mechanical hazards and risks - for example associated with the size and power of the mechanical equipment.</p> <p>Assists more senior statutory positions with monitoring the implementation of the mechanical engineering critical control plan.</p> <p>Provides advice to more senior statutory positions (SSE and surface mine manager) in relation to the selection, operation and maintenance of mechanical systems.</p> <p>Reports logistically to the SSE and technically to the surface mine manager.</p>

Consultation questions

HAVE YOUR SAY

- QUESTION 2: Do you agree with the Option 1 proposals for the additional certificates of competency? Please explain why, or why not? Are there any other options to address the problem?
- QUESTION 3: Do you think Option 1 will have the expected costs and benefits outlined in the cost benefit analysis?
- QUESTION 4: Are there other parameters or estimates that should be used instead when estimating costs and benefits?
- QUESTION 5: Are there cost and benefits currently not considered in relation to Option 1 that should be?
- QUESTION 6: What transitional period do you think will be reasonable for those currently in the safety critical positions to prepare for examination for certificates of competency, and gain a certificate of competency? Would a three-year transitional period be sufficient to obtain a certificate of competency?
- QUESTION 7: The BoI recommended that an underground coal mine SSE should also hold a first class underground mine manager certificate of competency. Should a surface coal mine SSE be required to be the holder of a surface mine manager certificate of competency so that a consistent approach is adopted?
- QUESTION 8: Should a surface electrical engineering manager also be required to hold an electrical engineering manager certificate of competency?

Have your say using the submission template

Continuing professional development

Issue

The CMSHA and MQSHA require that persons in particular safety critical roles hold a certificate of competency or SSE notice from the BoE. The importance of ensuring that these qualifications remain current was acknowledged in 2018 with an amendment to the Mining Safety Acts, allowing regulations to include requirements for holders of these competencies to undertake continuing professional development (CPD) as decided by the BoE.

Amendments made to the CMSHR and the Mining and Quarrying Safety and Health Regulation 2017 (MQSHR) in 2022 detail CPD requirements and introduce a practicing certificate scheme that will assist with streamlining and formalisation of these requirements. Prior to these amendments, there was extensive consultation on the CPD Scheme. The BoE consulted with industry stakeholders during 2020 and 2021. This included direct consultation with all UMMS and SSEs; the Queensland Resources Council; the Institute of Quarrying Australia; the Mine Managers Association of Australia (MMAA) and open forums with coal mine workers. The BoE also consulted through the Coal Mining Safety and Health Advisory Committee, SSE forums and mining industry conferences.

The New Zealand Mining Board of Examiners implemented its CPD scheme for those holding certificates of competency for safety critical positions in 2016, in response to the Pike River mine disaster which killed 29 coal mine workers. Also in 2016, the NSW Government introduced a practising certificate scheme based on completion of CPD for statutory position holders under NSW mining health and safety legislation.

The actions by the NSW and NZ regulators in establishing CPD schemes, and the consultation completed through the Mines Legislation (Resources Safety) Amendment Act 2018 and before the amendments were made to the CMSHR and the MQSHR in 2022; have resulted in positive expectations and support among industry stakeholders that a similar CPD scheme will be run by the Queensland BoE for mining industry certificate and notice holders.

The MMAA has stated that it supports the introduction of the requirement for continuous professional development and for all statutory officials to hold practising certificates. The MMAA states that whatever system of practising certificates is introduced, the competencies should be compatibly aligned in both the Queensland and NSW CPD schemes. To fully implement the practicing certificate scheme, a compliance and enforcement framework is needed. Without this framework, the legislated CPD requirements are unenforceable, and the scheme itself will be voluntary only.

Rationale for government action

The amendments made to the CMSHR and the MQSHR introduce CPD requirements for a person who holds a certificate of competency or an SSE notice to be implemented via a practising certificate scheme. Amendments include details about CPD activities, hours and periods. Certificate and notice holders can now apply for a practising certificate and start registering completed CPD activities.

In recent years, many holders of certificates of competency or SSE notices have supported CPD by voluntarily updating their skills and expertise (for example, through the MMAA, Engineers' Australia, and the Australasian Institute of Mining and Metallurgy) to ensure they maintain contemporary knowledge, and refresh and bolster existing competencies.

The next step in reinforcing the importance of CPD is to establish a compliance and enforcement framework for the practising certificate scheme to ensure that CPD is completed regularly in accordance with requirements.

The Brady Review and the BoI identified a lack of training and supervision as contributing factors to incidents, resulting in fatalities in the mining industry. The practising certificate scheme will help to ensure that those in particular safety critical roles maintain appropriate competency training in key CPD areas, including mining methods, emergency management and leadership, risk management, and legislation changes over time.

The issuing of practising certificates by the BoE will confirm the holder's completion of the required CPD hours. The compliance and enforcement framework for practising certificates would be integrated with the existing compliance and enforcement framework for certificates of competency and SSE notices.

Source	Evidence
Brady Review	When examining the mining fatalities from (2000 to 2019) Dr Brady found that a total of 17 of the 47 fatalities involved a lack of task specific training and/or competencies for the tasks being undertaken. A further nine had inadequate training. These tasks were often undertaken at the direction of supervisors or others who were aware of these deficiencies. ²⁹ An example of this relates to a fatality that occurred at Grasstree Mine in 2014 where a worker, who was not assessed as competent, was sent to calibrate a gas detector. The worker was unsupervised and not familiar with that area of the mine. These factors led to the worker being unaware of the presence of an irrespirable atmosphere, which

²⁹ Refer page 30 of the Brady Review available at <https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2020/5620T197.pdf>.

	<p>led to his death.</p> <p>In 32 of the 47 fatalities, supervision was required for the tasks being undertaken, i.e., they did not include routine tasks, such as driving. Twenty-five of the 32 fatalities involved inadequate or absent supervision. There were a variety of supervision issues, such as absent supervision, supervisors with inadequate knowledge of the hazards and level of risk, and supervisors who watched as workers undertook unsafe acts.</p> <p>The Brady Review noted an example at Wongabel Quarry in 2006, where the supervisor observed a worker driving a loader with the bucket too high but did not intervene. A fatality occurred when the loader struck another worker.</p> <p>These findings link to Brady recommendations 2, 3, 4 and 6.</p>
Safety Resets 2019	<p>The safety reset included an online survey which received 518 responses from 110 mine sites, and 20 interviews. The four most prevalent perceptions raised from the floor by workers at resets and through the survey exercise were:</p> <ol style="list-style-type: none"> 1. The importance of leadership in addressing safety issues and the impact this had on safety outcomes. 2. The impact of workforce casualisation and the importance of an experienced, well-trained, and permanent workforce in improving safety outcomes. 3. The need for improved quality of training and more frequent training. 4. The need for clearly defined, standardised and simplified processes, policies, and procedures.

Objective of government action

The objective of government action is to ensure that the CPD scheme can be adequately enforced.

Options

Option 1 – Amend legislation

Changes are proposed to the CMSHA and the MQSHA to support the CPD Scheme and the introduction of additional practicing certificates. Whilst the ability of the BoE to determine CPD for certificate of competency and SSE notice holders has been established through the *Mines Legislation (Resources Safety) Amendment Act 2018*, it is preferable to have this explicitly stated under the prescribed functions of the BoE.

As the certificates of competency and the SSE notices will function in conjunction with CPD it is proposed that the compliance and enforcement framework currently in place for these competencies will be amended to specifically include practising certificates. That is keeping a register of practising certificates; suspension, cancellation, or surrender of a practising certificate; the impact of a practising certificate being suspended or cancelled; obtaining a practising certificate by providing false information; and auditing.

Functions of the BoE

It is proposed that the ability of the BoE to decide the CPD requirements for practicing certificates be specifically prescribed in section 185 of the CMSHA and section 180 of the MQSHA, and for the BoE to issue practising certificates to persons who have demonstrated to the BoE's satisfaction, completion of the required CPD for the respective practising certificate.

Register to include practising certificates

The BoE currently keeps a register of certificates of competency, SSE notices and registration under mutual recognition, under section 193A of the CMSHA and section 185 of the MQSHA. These sections are proposed to be amended to also refer to the BoE keeping a register of practising certificates and the same information about holders, as is kept for certificates of competency. As the register currently exists, it is not envisaged that any additional costs will be incurred.

Consideration of suspension, cancellation or surrender for application for practising certificate

The BOE can currently consider any previous suspension, cancellation or surrender of a certificate of competency or SSE notice when deciding an application, under section 194A of the CMSHA and section 181A of the MQSHA. It is proposed that these sections be amended to also refer to the BoE specifically being able to consider any suspension, cancellation or surrender of a practising certificate made under the Mining Safety Acts.

False information

Section 195 of the CMSHA and section 182 of the MQSHA currently makes it an offence for a person to become, or attempt to become, the holder of a certificate of competency or SSE notice by giving false information to the BoE. These sections also enable the BoE to cancel a certificate of competency or SSE notice if it was obtained through false information and to notify the SSE or mine operator. Similarly, these sections are proposed to be amended to enable the BoE to cancel a practising certificate if it was obtained through false information and to notify the SSE or mine operator. An offence would also be required for when a person

becomes or attempts to become, the holder of a practising certificate by giving false information to the BoE. The enforcement framework for attempting to become a holder of a practising certificate by giving false information will mirror the enforcement framework for the equivalent offence in relation to certificates of competency.

Returning a practising certificate

Sections 196 of the CMSHA and 183 of the MQSHA cover the circumstances when the holder of a certificate of competency or SSE notice must return the certificate or notice to the BoE. That is, when the certificate or notice has been cancelled by the BoE, a magistrate or the Chief Executive Officer (CEO) of RSHQ or when the holder surrenders the certificate or notice. These sections are proposed to be amended to include when the holder of a practising certificate must return the certificate.

Effect of appointment to a safety critical position following suspension, cancellation or surrender of a practising certificate

Section 196A of the CMSHA and section 184 of the MQSHA confirm that a person's appointment to a safety critical position ends on the suspension, cancellation or surrender of a certificate of competency or SSE notice. Similarly, these sections are proposed to be amended to also provide that a person's appointment to a safety critical position ends on the suspension, cancellation or surrender of a practising certificate.

It is proposed that there be amendments to sections 54, 59, 60, and 61 of the CMSHA, and sections 49 and 53 of the MQSHA, to not only require an SSE notice/certificate of competency for appointment to the respective safety critical positions, but also the respective practising certificates.

It is important to note that the practising certificate scheme has a lengthy lead in time. Stakeholders are being encouraged to register for the scheme from 2022. The regulatory amendments include a transition period of three years before the requirement to complete CPD activities becomes mandatory within the CPD period.

Auditing of CPD completion

Holders of certificates of competency, or SSE notices, would need to lodge information about the completion of their CPD in the BoE database, to enable the accuracy of the CPD information to be verified for the granting and retaining of practising certificates.

Auditing of the completion of CPD would be conducted by internal RSHQ auditors or external auditors who may check the accuracy of details about completed CPD registered in the BoE database system by holders of practising certificates.

The chairperson of the BoE would be able to conduct a show cause process if CPD requirements have not been met, or if there is some other form of non-compliance. This process would precede any further possible compliance and enforcement stages.

Suspension and cancellation of practising certificates

The CMSHA and MQSHA already have sections providing for the suspension and cancellation of certificates of competency and SSE notices by the CEO of RSHQ. The relevant sections in the CMSHA are sections 197A to 197D, and in the MQSHA, sections 186 to 189. A certificate of competency or SSE notice may be suspended or cancelled if the holder has contravened a safety and health obligation or committed an offence relating to mining safety. Appeal rights will apply to all such decisions.

These sections are proposed to be amended to provide that if a certificate of competency or SSE notice is suspended or cancelled, the associated practising certificate will also be suspended or cancelled.

It is also proposed that there be new sections added to the CMSHA and MQSHA providing for the suspension or cancellation of a practising certificate if CPD is not completed, but this suspension or cancellation would not also apply to the associated certificate of competency or SSE notice. A practising certificate could be reinstated if the issue that led to its suspension or cancellation was resolved. Every effort will be made to ensure that the required training is accessible to all, and extenuating circumstances will be considered by CEO during the suspension or cancellation process.

Associated amendments

Amendments are also proposed to the CMSHA and MQSHA to confirm that regulations can be made about procedural matters relating to practising certificates for holders of certificates of competency or SSE notices. This should include procedural matters for the BoE that are similar to the matters covered in the NSW Work Health and Safety (Mines and Petroleum Sites) Regulation 2014, which also cover interstate practising certificates.

Impacts and benefits

It is estimated that 2,500 certificate of competency holders and 650 SSE notice holders are

active within the mining industry. The changes to the CPD scheme currently being implemented will affect this entire cohort when they are employed as a statutory position holder in a safety critical role. This same cohort will be affected by these proposed amendments.

The following are the costs and benefits of having a mandatory CPD scheme to improve the maintenance of competency by all certificate of competency, or SSE notice holders.

Costs	Benefits
No additional costs to those that already exist through requirements for keeping competencies contemporary and relevant.	A mandatory requirement rather than a voluntary requirement will ensure and improve the maintenance of competency of those in safety critical positions over time.
Approximately 2,500 certificates of competency and 650 SSE notices are currently in operation within the mining industry. The costs to the employee/employer/regulator will depend upon delivery of the training and who bears the costs.	All these mine workers will benefit from having to keep their skills and expertise up to date and in keeping with modern practices.
There would be minimal costs for the BoE and the regulator in implementing the supporting compliance framework for the CPD Scheme. It will be undertaken within existing funding arrangements.	CPD is a proactive approach, as the enhanced competency through CPD among those in safety critical positions has the potential to prevent some serious incidents occurring.
	As well as providing relevant refresher and new technology training, a CPD scheme will also contribute to the importance of leadership in addressing safety issues. Proposed areas of competence under the CPD scheme are mining methods; legislation, emergency management and leadership, health and safety/risk management.

Option 2 – Status quo (do nothing)

With no changes to the legislation being proposed, this option would see the CPD scheme continue to be established as planned, without the ability of the regulator to enforce the requirements. It is likely that the anticipated safety benefits of the CPD scheme will not be fully realised.

Recommended option

Option 1 is recommended as this would see the CPD scheme currently being implemented reach its greatest potential. Option 2 will not meet the objective for government action.

Consultation questions

HAVE YOUR SAY

- QUESTION 9: Do you agree that the integrity of the CPD Scheme would be best supported through the proposed legislative changes?
- QUESTION 10: Do you envisage any unanticipated costs to you or your organisation with the introduction of a compliance and enforcement framework for the CPD scheme?

Have your say using the submission template

Establish site safety and health committee

Issue

There is a need to improve the mechanisms for safety issues to be raised by workers as identified by the Bol. Facilitated reporting of safety issues by workers is a key part of addressing this problem. 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 7 - Employee versus contractor worked hours³⁰). 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 Bol considered some of those disadvantages, potentially negatively impacting safety, include³¹:

- 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. This

³⁰ Dr Sean Brady, Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019, December 2019, at <https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2020/5620T197.pdf>.

³¹ Bol Report II, points 11.45, 11.47 and 11.55.

concern is reflected in statements provided to the BoI,³² which gave anecdotal evidence of contractor workers being reluctant to report safety and health issues for fear of losing their jobs.

The Brady review and the BoI outlined the need to improve the reporting culture at all levels and across all types of employment to galvanise safety culture and reduce serious accidents in the resources industry. Under-reporting and non-reporting of safety risks was one of the themes highlighted in several BoI findings from the Grosvenor incident³³. The Brady Review highlighted that in order to reduce fatalities, the industry must move towards becoming an HRO. Part of being a HRO is having an appropriate reporting culture in which people are prepared to report errors, near-misses, unsafe conditions, inappropriate practices, and any other concerns they may have about safety. Reporting safety issues is considered paramount to moving towards an HRO.

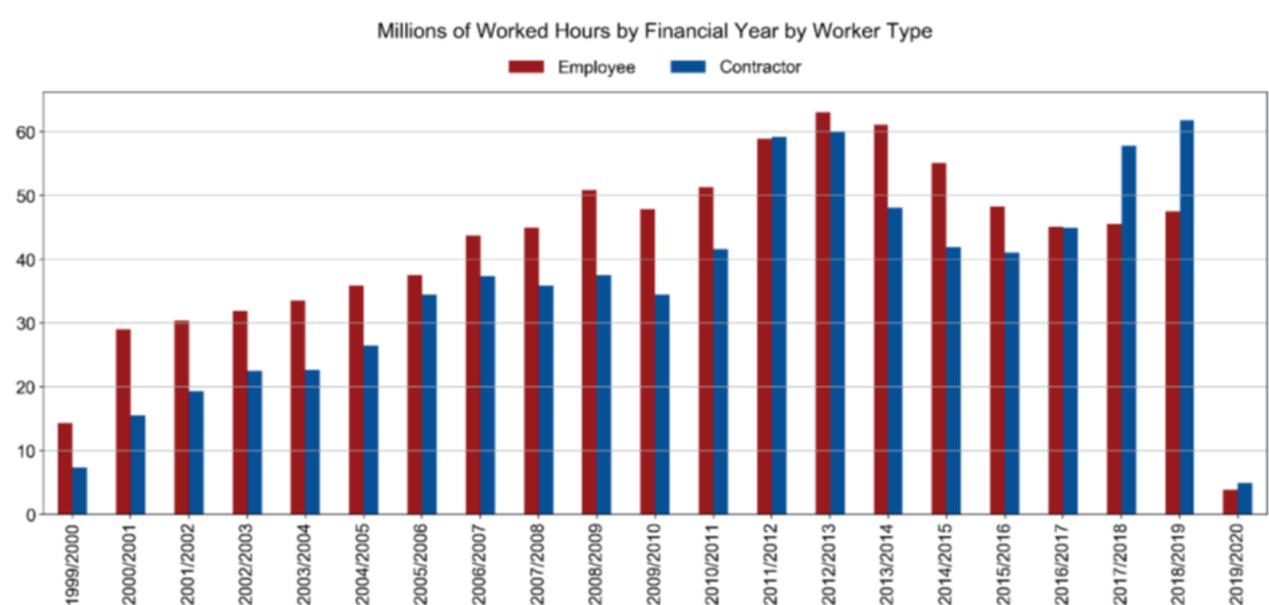


Figure 7 - Employee versus contractor worked hours

Rationale for government action

The rationale for government action is improving the mechanisms for safety issues to be raised by workers. While the reporting of any safety issues will still be up to the individual, providing an array of mechanisms will bolster the access for reporting which can potentially make a difference for workers, including contract workers.

³² BoI Report II, chapter 11, e.g., points 11.146 and 11.149.

³³ BoI Report II, findings 85, 86, 87, 90, 94 and 95.

Source	Evidence
Brady Review	<p><i>Recommendation 6</i> - The industry should adopt the principles of High Reliability Organisation theory in order to reduce the rate of Serious Accidents and fatalities. At its most fundamental level, High Reliability Organisation theory focuses on identifying the incidents that are the precursors to larger failures and uses this information to prevent these failures occurring.</p>
Bol Report Part II	<p><i>Finding 85</i> - 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.</p> <p><i>Finding 86</i> - 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.</p> <p><i>Finding 87</i> - It is critical to safety at mines that all safety concerns are raised in a timely way.</p> <p><i>Finding 95</i> - There is scope to improve the mechanisms for safety issues to be raised by workers. Safety committees similar to those in the WHS Act and the Mining and Quarrying Safety and Health Act 1999 (MQSHA) are not provided for under the Coal Mining Safety and Health Act 1999 (Qld) (the Act).</p> <p><i>Recommendation 27</i> - 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.</p>

Objective of government action

The objective of government action is to facilitate mechanisms for raising safety issues by workers.

Options

Option 1 – Amend legislation

Amend the CMSHA to enable a committee-based mechanism for workers and management to discuss safety and health issues related to their work sites. It is proposed that the amendments be modelled on Part 7 of MQSHA for site safety and health committees (SSHCs), as it most closely aligns with the work practices of the industry. 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 Bol,

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.

Overview of proposed SSHC structure

An SSHC would be requested by a site safety health representative (SSHR), who is already required to be elected by, and represents, site workers within a coal mine safety management system. That SSHR already has powers under the CMSHA in relation to mining safety (such as the ability to halt operations) and that position is normally integrated into the safety management systems of a mine. Where an SSHR, or workers, consider that integration could be improved through an SSHC it can be requested and must be established.

When convened, an SSHC must meet at least every three months, have an equal number of worker representatives and management members, and site management must maintain and make available minutes of the meetings, provide facilities for the meetings, pay worker representatives their usual rates, and provide any necessary training. Penalties may apply where management obligations for an SSHC are not met. Related offences under the MQSHA attract maximum amounts of either 40 or 100 penalty units.

Under the proposed structure, there are no line reporting requirements other than obligations specified to notify the SSE when exercising their powers. What this means is that, unlike the safety advisory committees, the SSHC runs independently of management at the mine.

The full details of the proposed structure of the committee, including its functions and what operators must facilitate are provided in Appendix 5.

Impacts and benefits

Costs	Benefits
SSE will need to enable time for SSHC functions to be carried out. Experience under the CMSHA shows that, generally, there is a meeting once a month and the work that is required for those meetings would be about two hours. The impacts on time are not considered to be significant, particularly if the mine is managing safety and health matters adequately.	No additional staff required (SSHR are already required to be elected)
	SSHC runs independent of management, which should encourage reporting by all workers, including contract workers.

	The provision of an SSHC better supports the CMSHA’s objectives by allowing cooperation in achieving health and safety outcomes.
	This option supports recommendation 27 of the BoI report by providing for a reporting mechanism where workers and management come together to discuss safety and health concerns.
	This option supports recommendation 6 of the Brady Review of moving the industry towards becoming a HRO, promoting sensitivity to operations and preoccupation with failure.

Option 2 – Non-regulatory option

Option 2 is to encourage site operators to implement a similar reporting mechanism.

One alternative option is to take no legislative action but encourage industry to develop a committee similar to the SSHC. However, this option is not considered feasible as it does not directly address the issue of improving the mechanisms for safety issues to be raised by workers. Also, maintaining consistency across the two Mining Safety Acts is important for increased efficiency. The Queensland Government has a strong commitment to improving safety outcomes for the Queensland mining industry and to implementing the BoI recommendations. This option does not support recommendation 6 of the Brady review, of moving industry towards becoming an HRO. Nor does this option provide certainty to the sector about the safety reporting mechanisms that would be available to them.

This alternative option would mean that having a committee would be subject to the discretion of the operator, rather than entrenching it in legislation. For those industry participants who decide to implement a committee, their approach might be subjective based on what the site operator felt was needed for the committee, which might not be best for improving safety outcomes for their workers. It is likely that contract workers, such as labour hire workers will not be encouraged to report issues in a system that was set up by their employer, based on the findings of the BoI. Consistency would be difficult to achieve under a system that is subject to the site operator’s views. Considering the evidence presented in the BoI report, not facilitating a reporting mechanism such as the one offered via an SSHC, will not address the issue of access to complaints mechanisms by labour hire workers.

Impacts and benefits

Costs	Benefits
None on industry-unless the operator chooses to instigate a similar reporting mechanism.	No burden on government to carry out as no legislative amendment required.
No consistency across the coal mining and mining and quarrying sector.	No burden on industry as there is no requirement on an operator to allow for a similar reporting mechanism.
The BoI and Brady review recommendations will not be supported.	
No mechanisms representing the interests of workers to encourage reporting, particularly for contract workers.	

Recommended option

Option 1 is the recommended option. It will achieve the government objectives and improve safety mechanisms for safety issues to be raised by workers, therefore improving reporting and safety and health outcomes. There will be a minimal cost impact on industry. Option 1 will support the BoI recommendations and the Brady review recommendations. It will support industry becoming HROs.

Consultation questions

HAVE YOUR SAY	
QUESTION 11:	Does the proposed SSHC structure provide an adequate structure that coal industry would support?
QUESTION 12:	What is an appropriate transitional period to allow for industry preparedness in adopting the new amendments to the SSHC provisions and why have you nominated this period? a. None required b. 6 months c. 12 months

Have your say using the submission template

Improved data and incident reporting by operators

Issue

Implementation of HRO theory provides a way for organisations that operate in hazardous conditions to reduce accidents or events of harm. One of the attributes of being an HRO is a culture of collective mindfulness, focussing on a system of continuous monitoring, with workers

looking out for, and reporting, safety issues regardless of how significant they may be.³⁴ Consequently, improvements go toward building a high-reliability culture.³⁵ Under-reporting of safety and health incidents was identified as a key issue by the Brady Review which stressed the importance of a strong and open reporting culture to improve safety.

RSHQ is currently undertaking a number of internal projects to ensure that systems are appropriate for data capture and sharing. With the introduction of the enhanced incident reporting system within RSHQ, a number of gaps have been identified in the incident reporting and data capture frameworks. These issues, which are discussed in further detail below, need to be addressed to improve the collection, use and storage of data and the efficacy of incident reporting.

Rationale for government action

Improvements for data and incident reporting are needed to support an HRO reporting culture where administrative burden is minimised, reported information can be easily verified, and all parties have the opportunity to learn from shared sector-wide incident information. Incident notification and reporting is a core component of effective safety regulation. Incident data and its analysis underpin the regulator's ability to share safety learnings and trends with industry, inform strategy and improve safety and health outcomes for resource sector workers. Details about the individual improvements needed are detailed below.

Lost time injuries (LTIs) and hazards database

The Mining Safety Acts currently require the regulator to keep and maintain records about lost time injuries. Both the Brady Review and the BoI supported a move away from using LTIFR and to instead adopt serious accident frequency rate as a measure of safety performance and HPI frequency rate as a measure of reporting culture. Therefore, there is a need to change the requirements for maintaining records about LTIs.

The CEO has a legislative obligation to keep and maintain records that include a database of information about hazards and methods of controlling the hazards. It is now recognised that this database is rarely used. Additionally, industry bears responsibility for risk management and critical controls and has intimate knowledge of its mine site operations and therefore is best placed to maintain such information. Therefore, there is no benefit in the CEO having a

³⁴ Weick KE, Sutcliffe KM. *Managing the unexpected: Resilient performance in the age of uncertainty.*, 2nd ed. San Francisco, CA: Jossey-Bass; US; 2007.

³⁵ J. Cantu, J.N. Tolk, S. Fritts, A. Gharehyakheh, 'High reliability organization (HRO) systematic literature review: Discovery of culture as a foundational hallmark', *Journal of Contingencies and Crisis Management* (2020).

legislative obligation to maintain this information. This is a different responsibility to that of the CEO keeping and maintaining a database of HPIs to determine requirements for intervention, where appropriate and for reporting purposes. This responsibility supports HROs.

Oral reporting

Section 198 of the CMSHA, section 56 of the Explosives Act, section 195 of the MQSHA, and section 705D of the PG Act require specified incidents to be reported to the chief inspector/inspector either orally or written, either as soon as practicable or immediately after the incident. The petroleum and gas incident reporting framework provided for by section 706 of the PG Act and section 10 of the Petroleum and Gas (Safety) Regulation 2018 (PG Reg) requires prescribed incidents to be reported immediately by telephone. The Mines and Explosives Inspectorates and RSHQ's enhanced incident reporting system have identified issues with having an option to provide written reports and have indicated that instead an immediate oral report, would support improved safety outcomes. The current requirement to provide a written report to follow up the initial report are not proposed to be changed.

Extension of time

Section 201 of the CMSHA, section 16 of the CMSHR and section 198 of the MQSHA set out the requirements and response required of the SSE for instances where there has been a serious accident or HPI. Part of the required action includes that an investigation be carried out and a report prepared. Under current provisions the report must be provided to an inspector within one month after the accident or incident. RSHQ is aware that there are times where it is not possible to provide a comprehensive or meaningful report within this timeframe due to the complexity of the investigation. This can result in a report being provided to RSHQ that is not sufficient or comprehensive due to the inability to gather the relevant information and facts of the incident. Therefore, it is necessary to consider the ability to have discretionary power to grant an extension for this timeframe.

Alignment of penalties for failure to report

Currently under the Resources Safety Acts, there is an obligation for serious accidents and HPIs to be investigated and reported to the regulator. There is an associated penalty for failure to report; however, there is no consistency across these Acts with the maximum penalties.

Under the Mining Safety Acts, the current provisions provide for the maximum penalties as shown in Table 7 (below).

Table 7 - Maximum penalties under the Mining Safety Acts

Legislation	Penalty
Section 195(1) of the MQSHA and section 198(1) of the CMSHA	Failure to report accidents, incidents, deaths or diseases has a maximum penalty of 40 penalty units
Section 195(3) of the MQSHA and section 198(3) of the CMSHA	Penalties in relation to the timing of notification of the event (primary information) which has an associated maximum penalty of 40 penalty units
Section 195(3B) of the MQSHA and section 198(3B) of the CMSHA	Places an obligation for the SSE to ascertain the primary information and to give it to the inspector as soon as possible. The maximum penalty is 40 penalty units
Section 195(4) of the MQSHA and section 198(4) of the CMSHA	Where an oral report is provided, it must be confirmed in writing within 48 hours. Failure to do so has a maximum penalty of 40 penalty units
Section 195(5) of the MQSHA and section 198(5) of the CMSHA	If the oral report relates to a death, it must be confirmed in writing within 24 hours. Failure to do so has a maximum penalty of 80 penalty units
Section 195(6) of the MQSHA and section 198(6) of the CMSHA	Where there has been a report of a reportable disease, notice must be given about the disease, and there is a maximum penalty of 40 penalty units
Section 195(7) of the MQSHA and section 198(7) of the CMSHA	Where a person prescribed by regulation becomes aware that a worker has been diagnosed with a reportable disease must give notice the maximum penalty is 40 penalty units
Section 706(2) of the PG Act	For incidents that occur at operating plant or incidents relating to gas devices, they must be reported in the prescribed way or there is a maximum penalty of 50 penalty units
Section 706(3) of the PG Act	If the incident happens at a business other than operating plant and relates to a gas related device, failure to report will result in a maximum penalty of 50 penalty units

Under the WHSA, there is a duty to report notifiable incidents. Failure to notify will attract a maximum penalty of 100 penalty units (refer section 38 of the WHSA). This is inconsistent with the Resources Safety Act provisions.

Therefore, there is a need to consider increasing penalties to demonstrate the importance of notification of incidents and reporting. The Brady Review highlights the importance of HPI reporting and that this data can lead to early intervention to prevent fatalities. Data can also be used to identify hazards and determine appropriate controls to minimise harm. It also allows for sharing of safety information across industry. Additionally, notifying RSHQ allows the appropriate investigating and reporting to be completed. Increasing maximum penalties is one

way to demonstrate the importance that should be placed on reporting with appropriate penalties for a failure to report.

Cessation of operations

The Mining Safety Acts do not currently require notice to be given when a mine site ceases operation. The regulator needs this information in order to have visibility of which mine sites are operating so that there is the ability to appropriately regulate all mines in operation and maintain accurate records.

Inclusion of notification of various roles in the management of a mine to RSHQ

Currently section 65 of the CMSHA provides that the SSE must notify the inspector of any change in the management structure within 14 days. Failure to do so results in a maximum penalty of 50 penalty units. This requirement does not apply in the MQSHA and is needed (except for certain mines with four or less workers). This is important as it ensures that RSHQ has up to date information and is able to monitor effectively. This will ensure that in the event of an emergency appropriate contact can be readily made.

Source	Evidence
Brady Review	Recommended for the regulator’s role to include the collation, analysis and dissemination of incident and fatality data collected from industry to inform safety learnings and future direction for safety and health approaches for industry. It also recommended development of a system that maximises the probability of incident reporting (Recommendation 7 and 8). A specific change recommended by the Brady Review and endorsed by the BoI was for the regulator not to place a heavy reliance on lost time injury frequency rate (LTIFR) as a predictor of serious accidents (Recommendation 9).
BoI Report, Part I	Part 1 of the BoI Report states that RSHQ rightly moved away from LTIFR and towards SAFR as a measure of safety performance.
HRO	A feature of HRO theory is that HRO organisations have a reluctance to simplify and therefore they are continually analysing problems by looking at data and performance metrics to ensure continual improvements and to implement proactive interventions. Another principle of HRO theory is ‘preoccupation with failure’ – which means actively seeking out, recognising and acting upon weaknesses in systems and learning from incidents.
Best Practice	Data and incident analysis is a critical element in establishing or enhancing a reporting culture. Gathering the appropriate data allows for analysis of trends and incidents that can lead to strategic and targeted interventions being put in place to prevent incidents from occurring in the future. This information can also be shared broadly to encourage learning across the sector. The importance

	of data and incident analysis in hazardous environments has been determined throughout empirical research.
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Objective of government action

Incident data and its analysis underpins the opportunity for RSHQ to share industry safety learnings and trends and inform strategic direction to improve safety and health outcomes for workers. Operators regulated by RSHQ are required by the Resources Safety Acts to notify the regulator and submit reports on specific types of incidents. This Incident notification and reporting is critical for effective safety regulation.

The government objective is to improve data and incident reporting to ensure that organisations have access to timely and relevant data and incident reporting information that will assist organisations in their transition to becoming a HRO and improve safety and health outcomes.

Options

Option 1 – Amend legislation

RSHQ's enhanced incident reporting system is a business transformational project that is driving change in line with the Brady Review recommendations and involves development of a new incident management system for mining safety. This will eventually be broadened to the Explosives and the Petroleum and Gas Inspectorates. Reporting systems and processes within RSHQ are being transformed into an interactive incident reporting system where information is collected and stored and used to proactively share knowledge and industry data analytics. This project includes improved processes, reporting systems, data and management, with easier access for the regulator and industry.

The proposed legislative changes are the only solutions available to support those systems and ensure that RSHQ is able to move towards best practice incident data management.

Remove reference to LTIs and hazards database

It is proposed to remove reference to LTIs. LTIs are no longer considered to be an optimal measure and the Brady Review indicated that: 'as a measure LTIs are prone to manipulation and are a measure of how the industry manages injuries after they have occurred, as opposed to a measure of industry safety'. More accurate measures are available, including serious accident frequency rate as a measure of safety performance and HPI frequency rate as a measure of reporting culture. HPIs are already provided for under the provisions. Reference to

LTIs and the hazards database should be removed from section 280 of the CMSHA and section 260 of the MQSHA. These references should be replaced with references to maintain a database of information about serious accidents. These amendments will ensure that legislation and measures used remain responsive to identified best practice.

Oral reporting

It is proposed to amend the following legislative provisions; section 198 of the CMSHA, section 56 of the Explosives Act, section 195 of the MQSHA, and section 705D of the PG Act to require an immediate oral report. The current requirement to provide a written report to follow up the initial report will remain.

Extension of time

It is proposed to amend the Mining Safety Acts to provide for a discretionary power to allow for extensions of time (up to 12 months) for the submission of reports (see section 201 of the CMSHA, section 16 of the CMSHR and section 198 of the MQSHA) after an incident has occurred. This will ensure reports submitted to RSHQ incorporate the complete picture.

Alignment of penalties for failure to report

It is proposed to align the penalty provisions for failure to report under the CMSHA, the MQSHA and the PG Act with the WHSA, namely, to increase the penalties identified in Table 7 above to 100 penalty units.

It is important that information is gathered and used as an education tool to prevent further incidents across industry. With accurate data, appropriate and targeted interventions can be identified and implemented to minimise further incidents. To demonstrate the importance of providing the information about incidents, higher penalties should be introduced and aligned across the identified Acts.

Cessation of operations

It is proposed to amend the CMSHA and MQSHA to insert a new provision providing an obligation on the operator of a mine site to notify the regulator of the cessation of a site's operations. To regulate effectively and ensure that workers and sites are safe, RSHQ, as the regulator, must have oversight of the operations that have ceased operations, and this will allow accurate records to be kept of operations for reporting purposes.

Inclusion of notification of various roles in the management of a mine to RSHQ

It is proposed to insert a new provision into the MQSHA to align with section 65 of the CMSHA in relation to notification of when there is a change in management structure. This will ensure that RSHQ can maintain accurate records and has knowledge of the management structure of a mine which assists with response where an incident has occurred. Associating a penalty with failure to do so will also demonstrate the importance of providing this information to the regulator. It is also noted that this is a requirement in a number of other jurisdictions (for example, the Northern Territory and Western Australia).

Impacts and benefits

These amendments will have a positive impact across the resources sector and will provide the regulator with improved data collection, analysis and outputs from the data.

Costs	Benefits
RSHQ costs will be absorbed as part of this project which is being funded with internal funding.	Internally, RSHQ has been undertaking an enhanced incident reporting project which will be able to accommodate the new data approach.
Removing reference to LTIs is unlikely to have significant cost or impacts on stakeholders as industry is already required to report on serious accidents.	Removal of LTIs will facilitate an improved focus on serious accidents as a measure of safety performance and HPIs as a measure of reporting culture.
The requirement to make an immediate oral report is likely to be minimal.	The benefits will support improved safety outcomes through allowing the inspectorates to immediately capture the required information and ask relevant questions to seek further information. This will also enhance the quality of data obtained.
The extension of time to provide a report to the regulator will not have increased costs for RSHQ or stakeholders as it is not placing any further burden or obligation on industry.	The discretionary extension of time to provide a report to the regulator will have a positive impact on stakeholders as it provides sufficient time for the investigation to be completed and for a factual report to be provided to the regulator for future learnings and appropriate responses and interventions.
Alignment of the penalty provisions for failure to report will not increase costs. Industry will only be subject to the higher maximum penalty if they commit an offence.	Alignment of the penalty provisions for failure to report will provide an appropriate deterrent. It will ensure that with accurate data, appropriate and targeted interventions can be identified and implemented to minimise further incidents.

Impacts will be minimal for the operator to report on the cessation of operations as they will merely be required to provide notification to the regulator and there will be no cost impacts.	Provision of cessation of operations information to the regulator will support effective regulation.
Inclusion of notification of various roles in the management of a mine to RSHQ will have minimal impacts as operators will merely be required to provide notification to the regulator. As such there will be no costs impacts.	Provision of information relating to management of a mine to the regulator will support effective regulation.

Option 2 – Status quo (do nothing)

Legislative amendments are required to achieve the policy objectives stated above. Maintaining the status quo will mean that the Resources Safety Acts are not maintaining pace with identified reporting and data requirements. This option will not offer any improvements to reporting and data analytics and will therefore not contribute to or achieve any positive safety and health outcomes.

Recommended option

The required changes cannot be achieved without legislative amendments. These proposals will assist RSHQ in becoming an exemplar regulator that will be able to: collate; identify; and analyse accident trends and recurrent failures in risk-management, HPIs, the extent of injuries and risk factors occurring in the sector and in incident data. This will support sharing of safety trends and learnings and inform strategy for improvements and harm prevention for safety and health for resource sector workers. The changes will not have a significant impact on stakeholders and there will be minimal associated costs involved. The proposals are to assist RSHQ in gathering improved data that can be used to prioritise regulatory activities to risk; and analysed to gauge emerging risks and implement improvements that will minimise incidents. Improved data and incident reporting can improve safety outcomes. In high-hazard industries such as the resources sector, the requirement to capture, appropriately analyse, and use that information is imperative in creating safer workplaces and protecting workers from harm.

Information sharing to improve safety

Issue

RSHQ has the role of disseminating useful information and data to the industry. This information can be used to inform safety decision-making and with a view to preventing

incidents and serious accidents as well as providing visibility of safety performance. The Brady Review found that HRO theory relies on incident information being actively used in a way that educates industry in the understanding of the causes of accidents and fatalities and to prevent future incidents and serious accidents.

RSHQ currently provides information to the industry through safety alerts, safety bulletins, industry performance reporting and other hazard and risk related materials in order to share safety information and learnings with industry.

However, 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.

Rationale for government action

Under the Mining Safety laws the Minister, CEO and the Chief Inspector can already publish information about commission of offences and persons who commit the offences; investigations about accidents or HPIs; and any incident or other matter that may be relevant to persons seeking to comply with their safety and health obligations. Legislation administered by RSHQ, provides that certain officeholders, including the CEO and the Chief Inspector, are provided with express powers to make public statements about specific matters. These powers are provided under:

- section 275AC of the CMSHA
- section 254C of the MQSHA
- section 126C of the Explosives Act
- section 851A of the PG Act.

Under the Brady Review the importance of the regulator facilitating the collection, analysis, identification and dissemination of data from industry was a key recommendation to inform learnings and future strategic direction for safety and health approaches of the industry. When published, this information can be utilised as a tool for harm prevention and a means to educate the wider industry. Sharing safety information can also provide transparency and confidence to the public that safety and health in the resources sector is being appropriately managed and regulated and that workers are being protected.

In order to support this approach, RSHQ needs to be able to publish information relating to the number of HPIs and serious accidents that have occurred at a mine, the name of the mine and the operator of the mine.

Source	Evidence
Brady Review	This review recommended that the regulator should adopt the High Potential Incident Frequency Rate as a measure of reporting culture in the industry (Recommendation 11) ³⁶ .
HRO	A key principle of HRO theory is the importance of establishing a reporting culture and learning from HPIs and previous serious accidents.

Objective of government action

The objective is to improve sharing and publication of safety information, and inform industry and support their transition to HROs that will provide improved safety and health outcomes.

Options

Option 1 – Amend legislation

It is proposed to amend the Mining legislation to clarify that the Minister, CEO and the chief inspector can publish information about the number of HPIs and serious accidents, the mine at which these occurred and the operator for the mine.

The Explosives Act and the PG Act enable the Minister, CEO and the chief inspector to make public statements about the commission of offences and the persons who commit the offences, and investigations under the legislation etc. It is also proposed to clarify that for the Explosives Act that the Minister, CEO and the chief inspector can publish information about an explosives incident, the name of the holder of the authority and where the explosives incident occurred. In addition, it is proposed to clarify for the PG Act that the Minister, CEO and the chief inspector can publish information about a prescribed incident (which includes a dangerous incident), the holder of the relevant authority and where the incident occurred.

³⁶ Dr Sean Brady, Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019, December 2019, available at <https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2020/5620T197.pdf>.

Impacts and benefits

Costs	Benefits
There will be no cost impacts from these changes.	Improved sharing of safety information and safety and health outcomes.
	Responds to expert recommendations under the Brady Review.
	Improved transparency across the sector.

Option 2 – Status quo (do nothing)

This option will fail to achieve the policy objective and will not support the transition of industry to becoming a HRO nor will it support improved safety and health outcomes. Maintaining the status quo will fail to contribute to improved transparency across the sector and will maintain the ambiguity in relation to publication powers. The purpose of these amendments is to ensure that information can be used by industry to assist in prevention of incidents and to advance education of safety and health matters. The status quo will fail to provide further transparency or increase public confidence that the safety and health of resource sector workers is being protected.

Recommended option

The above amendments to the Resources Safety Acts identified in Option 1 are recommended. They will clarify the publishing of information provisions, will enable improved sharing of safety information and support improved safety and health outcomes. The Brady Review indicated that reporting of HPIs should be used as a measure of the reporting culture in industry rather than a measure of level of safety in the industry. The report also indicated that HPI reporting should be encouraged to ensure early warning signals of impending incidents and fatalities are captured and disseminated. HROs actively seek out these near miss signals, which are typically precursors to safety failures. Sharing safety information relating to HPIs and serious accidents will provide greater transparency.

Consultation questions

HAVE YOUR SAY	
QUESTION 13:	Do you support greater sharing of safety information and transparency in the resources sector?
<i>Have your say using the submission template</i>	

Modern regulatory enforcement

Contemporary and effective legislation is critical to ensure continuous improvement as it underpins the regulator's monitoring and enforcement activities. Changes to the safety framework also need to consider the effectiveness of compliance and enforcement tools currently available under the four Resources Safety Acts. Many of these tools have remained largely unchanged since the introduction of the respective Acts and have not kept pace with those available under comparable, and more contemporary, safety and health legislation (e.g., the WHSA and resources health and safety laws in other key mining states such as NSW and WA).

Enforceable undertakings

Issue

Enforceable undertakings (EUs) are tools used by regulators throughout the world and at a domestic level they are used in both Commonwealth and state government departments as well as being used by private organisations. They are used to remedy breaches against legislation in a versatile and flexible manner to achieve effective outcomes. RSHQ currently has a number of available options within the compliance toolkit to promote compliance. These include a mixture of educational, deterrent, coercive, punitive, and statutory powers.

As part of punitive and deterrent measures, RSHQ can (through the Work Health and Safety Prosecutor) pursue prosecution where it is in the public interest to do so and there is sufficient evidence. One of the issues with prosecution is that it can be a lengthy and costly process and sanctions that the court can impose are limited. In contrast, EUs offer flexibility to achieve a greater range and variation of outcomes that can lead to lasting improvements within the organisation and more broadly across the resources sector, whilst also ensuring accountability of relevant obligation holders. EUs can also allow an organisation to spend money on complying with the EU through measures that will have more direct and immediate positive impacts for the safety and health of their workers rather than costly and lengthy litigation costs for court proceedings.

Enforceable undertakings provide an opportunity to resolve compliance matters where a sanction or prosecution may not be appropriate or achieve the desired outcomes, be counter-productive or not in the public interest. To be an effective regulator, RSHQ must continually improve its compliance toolkit in order to achieve improved safety and health outcomes.

Rationale for government action

The introduction of EUs across the Resources Safety Acts will provide a flexible, responsive, cost effective and tailored compliance alternative and can provide a better overall regulatory outcome. They are proven in their efficacy and operate successfully and effectively across all Australian jurisdictions and in multiple regulators' portfolio legislation; including the Queensland WHSA. The introduction of EUs will support RSHQ in achieving better safety and health outcomes for the resources sector whilst strengthening the compliance toolkit.

EUs as an alternative to prosecution will provide quickly implemented compliance responses and outcomes for affected workers and their families. EUs allow the company or individual to acknowledge issues identified in relation to an alleged contravention. These undertakings allow for tailored compliance outcomes that ensure persons take responsibility for failing to meet their obligations.

Objective of government action

The objective is to ensure that there is range of compliance approaches available which will provide flexibility and ensure a tailored compliance response to suit individual circumstances. This will provide optimal safety and health outcomes for the resources sector.

Options

Option 1 – Amend legislation

This option will introduce EUs under the Resources Safety Acts to align with the EU approach taken under the WHSA. Guidelines governing the use of EUs will be established outside the legislative framework. It is not intended that EUs would be available in relation to serious accidents resulting in a fatality, or for circumstances that amount to industrial manslaughter. An enforceable undertaking is not an admission of guilt.

Once an undertaking is accepted, the organisation will be obligated to carry out the specific activities outlined in the undertaking. Undertakings will be published on the RSHQ website and will form part of the compliance history of the organisation whilst also being used as an educational tool for other organisations.

Undertakings are voluntary and neither a person nor the regulator can be compelled to make an undertaking; however, the regulator has discretion as to whether or not the undertaking will be accepted.

The relevant part in each Act will outline that an EU can be initiated by an obligation holder or RSHQ. When initiated by an obligation holder, the EU can be accepted by a chief inspector-excluding where there has been a fatality or where there has been an industrial manslaughter offence. RSHQ will develop and publish guidelines that state situations for which an EU might be employed, the potential subject matter for an EU and other procedural elements. It is anticipated that an activity under an EU may be for company office holders (including board members, company executive and/or statutory obligation holders) to attend meetings with RSHQ officers to provide updates (via presentation) on the outcomes of operator investigations and corrective actions at a company and site level. Other potential activities/undertakings under an EU may be that obligation holders prepare, publish or share information with industry in other formats lessons from incidents; or to invest in research and development into controls relevant to subject incidents.

Impacts and benefits

The number of people impacted will vary as it will be dependent on the number of breaches of the legislation, whether the circumstances are appropriate for an enforceable undertaking, and whether the undertaking is accepted by the other party.

Costs	Benefits
The regulator will incur some minor administrative costs in developing the guidelines that support the EU process along with some monitoring and compliance costs once an EU is in place; however, this can be absorbed by the existing RSHQ funding.	EUs will offer an opportunity for tailored compliance outcomes.
	EUs allow investment into organisational and safety changes that will directly improve safety and health outcomes.
	EUs provide flexibility in solutions that cannot be achieved through other processes, such as court sanctions.
	EUs can provide longer lasting benefits through ongoing commitments to compliance.
	EUs can be a more effective and timely solution when compared to costly legal proceedings for both the regulator and the organisation.

Option 2 – Status Quo (do nothing)

Under this option, there will not be a strengthened enforcement and compliance toolkit and an enforceable undertakings framework will not be established within the Resources Safety Acts. This option will not offer any benefits to the resources sector.

Recommended option

The recommended option is to include EUs under each of the Resources Safety Acts. This will allow the regulator to enter into legally binding agreements with mine operators and authority holders to undertake far reaching improvements for safety and health management. This option will offer an alternative to having the matter decided through legal proceedings and can achieve long term sustainable improvements and significant benefits - not only to the immediate workplace and workers, but potentially the industry as a whole. Guidelines will be developed using best practice and considering feedback from stakeholders provided through this consultation process. These undertakings are voluntary in that a person cannot be compelled to make an undertaking. The regulator has discretion as to whether or not the undertaking will be accepted. EUs provide a graduated approach to compliance, allowing tailored compliance approaches while also reserving the right to pursue enforcement action in the event there is a failure to comply with the undertaking.

An EU is not an admission of guilt. Once an undertaking is accepted, the organisation will be obligated to carry out the specific activities outlined in the undertaking. Undertakings will be published on the RSHQ website and will form part of the compliance history of the organisation whilst also being used as an educational tool for other organisations.

Consultation questions

HAVE YOUR SAY

QUESTION 14: What matters do you think should be covered by an enforceable undertaking?

Have your say using the submission template

Court orders

Issue

The traditional sanctions of fines, custodial sentences and limited court orders currently provided for under the Resources Safety Acts are not always effective in realising improved safety outcomes and enhancing community confidence. A fine on its own may have little impact

on influencing future improvement; however, a fine in combination with an order that requires the offender or their workers to undertake a specific training course may have a more tangible future safety outcome.

The value of sentencing options is acknowledged in other regulators' enforcement frameworks, such as those based on the national model WHS Act, which typically provide a broader range of options, including various types of orders that may be made by the court. The basis for the national model WHS Act providing the court with a wider array of sentencing options is noted in the First Report³⁷ prepared for public consultation on the development of the national model WHS Act, which stated:

“We conclude that the overall objectives of OHS regulation are best served by providing a wide range of sentencing options when there are convictions for breaches of duties of care. Gunningham and Johnstone have observed, in relation to corporate sanctions, a combination of measures will yield the best results in terms of achieving the overall goal of reducing the incidence of contraventions and hence the incidence of work-related injury and disease.”

Rationale for government action

The WHSA includes a variety of court orders including adverse publicity orders, costs relating to storage or disposal of a forfeited thing, injunctions, orders for restoration, work health and safety project orders, court orders relating to enforceable undertakings, court-ordered undertakings and training orders. There is also an offence for failing to comply with an order made by the court.

Additionally, NSW and WA resources safety and health legislation, which are also based on the national model WHS laws, have largely comparable court order provisions to those of the WHSA, with the exception of injunctions, which are not replicated under the WA legislation. By comparison, the enforcement tools currently available under the Resources Safety Acts, particularly in relation to sentencing for offences, are not as comprehensive or potentially effective as those available under other safety and health related regulatory frameworks (such as those available in other major mining states (i.e., NSW and WA) and in relation to general work health and safety matters in Queensland under the WHSA).

Under the current Resources Safety Acts, court orders are limited to costs (mainly investigation and prosecution related), damages (for reprisal) and forfeiture. There is also inconsistency

³⁷ Australian Government, National review into model occupational health and safety laws first report, October 2008, available at https://www.ag.gov.au/sites/default/files/2020-03/national_review_into_model_ohs_laws_firstreport.pdf.

across the Resources Safety Acts, with court orders for the recovery of unpaid fees and court orders for the suspension or cancellation of authorisations provided for under the Mining Safety Acts, but not under the Explosives Act or the PG Act.

This raises questions regarding why there are fewer sentencing options available to the court in relation to resources safety and health matters in Queensland. Given the significant impact a fatality or serious accident can have on a worker, their family, friends and the community, it is incongruous and difficult to justify that lesser options be available to the court in relation to sentencing safety and health matters relating to Queensland's resources sector.

A broader range of court orders in the Resources Safety Acts, comparable to those under the WHSA and the resources safety legislation of NSW and WA, would allow a court to tailor sentencing to achieve a better balance between increasing compliance, improving safety outcomes; and just and appropriate sanctions. A similar approach of having a range of orders available to the court for sentencing is also used under a range of other laws, including the *Environmental Protection Act 1994* and the *Fair Trading Act 1989*.

While industry could, and likely would, undertake additional measures for improving safety following a fatality or serious accident – a reliance on voluntary actions alone is not considered sufficient or appropriate. It does not address the current legislative imbalance in relation to the Resources Safety Acts when compared to general WHS and key interstate resources safety and health laws. Giving these actions the force of law in the form of a court order strengthens accountability for implementing these actions and may enhance public confidence that the legislative framework can deliver community expectations of justice. The only way greater alignment can be achieved is through amending the Resources Safety Acts.

Objective of government action

The key objective is to allow the courts to apply the most effective and appropriate punishment to deter future non-compliant behaviour. The aim is to ensure the compliance and enforcement tools available to the court in relation to sentencing for offences under the Resources Safety Acts are more comparable with those available under other contemporary safety and health frameworks, particularly in relation to court orders.

A secondary objective is to enhance deterrence, encourage meaningful action by an offender, be more targeted, and allow the court to impose a more proportionate response, thus enhancing safety outcomes consistently across the resources sector.

Options

Option 1 – Amend legislation

Amend the Resources Safety Acts to broaden court order provisions, so these are more consistent between the Acts and are more comparable to those available under other contemporary safety and health frameworks such as the WHSA. The proposed amendments work within the current legislative framework for resources safety without replicating the WHSA provisions, preserving the necessary distinctions between the frameworks that ensure the Resources Safety Acts' appropriateness to the high hazard industries to which they apply. Specifically, this option would include the following additional court orders under the Resources Safety Acts:

- **Adverse publicity orders** can be an effective deterrent for an organisation concerned about reputation. Such orders can draw public attention to a particular wrongdoing and the measures that are being taken to rectify it. For instance, the court may order an offender to publicise the offence or notify a specified person or specified class of persons of the offence, or both. The costs associated with an adverse publicity order is to be borne by the offender.
- **Costs orders** relating to storage or disposal of a forfeited thing would enable RSHQ to recover reasonable costs of storing and disposing of a thing that has been seized (and forfeited) to prevent it being used to commit an offence against the relevant Act.
- **Costs orders** relating to contravention of a court ordered undertaking could include that the person pay the costs of proceedings and pay RSHQ's future costs in monitoring compliance with the undertaking.
- **Injunction orders** relating to a legal proceeding would allow a court to issue an injunction requiring a person to stop contravening the relevant Act if they have been found guilty of an offence against it. This power can be an effective deterrent where a penalty fails to provide one.
- **Orders for the recovery of unpaid fees** under the Explosives Act and the PG Act, to align with those already available under the Mining Safety Acts.
- **Restoration orders** would allow the court to order an offender to take steps within a specified period to remedy any matter caused by the commission of the offence that appears to be within the offender's power to remedy.
- **Safety project orders** would allow the court to make an order requiring an offender to undertake a specified project for the general improvement of resources safety and health within a certain period. The order may also specify conditions that must be complied with in undertaking the project.

- **Suspension or cancellation orders** under the Explosives Act and the PG Act, relating to authorisations under those Acts (e.g., such as explosives authorities and gas work licences and authorisations). Comparable orders enabling the court to order the suspension or cancellation of a certificate of competency or SSE notice are already available under the Mining Safety Acts.
- **Training orders** would allow the court to make an offender take action to develop skills that are necessary to manage safety and health effectively. The court may also make an order requiring a person to undertake, or arrange for workers to undertake, a specified course of training.
- **Undertaking orders (enforceable)** relating to the contravention of an enforceable undertaking – these would allow the court, in addition to imposing a penalty, to direct the person to comply with the undertaking, or to discharge the undertaking. The court would also be able make any other order it considers appropriate in the circumstances.
- **Undertaking orders (court-ordered)** would allow the court (with or without recording a conviction) to adjourn a proceeding for a period of up to two years and make an order for the release of the offender on the offender giving an undertaking with stated conditions.

This option would also amend the four Resources Safety Acts to make it an offence for a person to fail to comply with an adverse publicity order, restoration/remediation order, safety project order or training order without reasonable excuse (maximum penalty—500 penalty units). In addition, provide that a person may be prosecuted for the original offence if the person does not comply with a court-ordered undertaking and provide that if a person does not comply with an injunction, they may be prosecuted for the contravention they have been ordered to cease.

Impacts and benefits

Option 1 could potentially impact any individual or corporation in the coal mining, mining and quarrying, explosives, or petroleum and gas sectors. However, any impact could only occur in relation to a prosecution (i.e., for non-compliance with an obligation/requirement under one of the Resources Safety Acts) and only when an order is made by the court - this would typically be in relation to the sentencing of an individual or corporation by the court.

Costs	Benefits
There are no direct monetary costs to business, the community or government associated with this option.	Expected to be beneficial in promoting improved safety outcomes and enhancing community confidence by equipping courts with a wider array of sentencing options.
Potential costs could arise because of an order made by the court - i.e., the costs associated with complying with the order. However, this would be determined by the court and would only apply where an offence has been committed.	Gives the court flexibility for making a combination of orders to enable better targeted and more proportionate responses.
	Provides for appropriate sanctions for failing to comply with an order of the court.

Option 2 – Status quo (do nothing)

Under this option, no legislative amendments would be made, meaning the court would continue to be constrained by the existing limited sentencing options under the Resources Safety Acts.

Recommended option

The recommended option is Option 1, under which it is proposed to amend the Resources Safety Acts so that a court be empowered to make orders including adverse publicity orders, costs orders relating to storage or disposal of a forfeited thing, costs orders relating to contravention of an enforceable undertaking (including costs of proceedings and future costs for monitoring compliance), injunctions, restoration orders, project orders (to undertake a specific project for improving resources safety and health), court-ordered undertakings (i.e. defendant released on the giving of a court-ordered undertaking) and training orders.

These changes will enable courts to use whichever order, or combination of orders, are considered by the court to have the best remedial or deterrent effect in particular cases. A new offence for failing to comply with an order made by the court is also proposed to ensure non-compliance with court orders can be appropriately addressed and a penalty of 500 penalty units is proposed. This penalty is consistent with that under the WHSA.

It is also proposed to amend the Explosives Act and the PG Act to provide for court orders about the recovery of unpaid fees and to enable the court to order the suspension or cancellation of authorisations under those Acts.

Collectively, these changes are expected to enhance safety outcomes as traditional sanctions in combination with proposed additional court orders have been shown to enhance deterrence,

encourage meaningful action by an offender, be more targeted and permit the court to impose a more proportionate response. They also give the courts more scope to tailor sanctions to deliver community expectations of justice. Option 2 (status quo) is not considered feasible as it fails to address the problem and goes not align with the objectives of the government action.

Directives

Issue

Under the Resources Safety Acts, RSHQ inspectors and other officials can issue a range of directives, remedial action notices and compliance directions (hereafter collectively referred to as 'directives') that generally require the recipient to take action by a stated date or refrain from taking certain actions.

Directives are a key compliance and enforcement tool used by RSHQ inspectorates; however, issues have been identified with the existing legislative frameworks under the Mining Safety Acts in relation to the efficient and effective administration of directives, limitations relating to directives for engineering studies, as well as the current reactive nature of directive powers concerning contraventions of the Explosives Act.

The directives frameworks under the Explosives Act and the PG Act provide a simple three directive approach which is largely consistent with the approach under the WHSA (i.e., relating to non-urgent remedial actions or improvements; dangerous situations requiring immediate action; and relating to the preservation of incident sites).

In contrast, mines are often very complex operations with unique health and safety risks when compared to other workplaces. Accordingly, the frameworks under the Mining Safety Acts provide for a broader range of specialised directives. As a result, there is some legislative ambiguity surrounding the operation of directives, particularly in relation to when a directive is deemed completed/complied with, who makes that determination (i.e., the mine operator or the regulator), and to what level/standard is considered appropriate. An example of this concerning a directive to review a mine's SHMS (or a principal hazard management plan for a coal mine) is that there have been occasions where a mine operator has reviewed and made changes to their SHMS as instructed in a directive but asserted the changes need not be verified by an inspector as there was no legal basis for this. A directive and the subsequent action to address it are both required to be recorded in the mine record, and so can be reviewed by inspector after the fact. However, providing a clear legislative mechanism for verification by an inspector prior to a directive being deemed completed would be a more efficient way of managing a directive (unless a directive is stayed, varied or set aside by the Industrial Court).

In addition, the directive powers under section 172 of the CMSHA and section 169 of the MQSHA enable the chief inspector to give a directive requiring the operator to provide an independent engineering study about several prescribed matters. The term 'engineering study' is not defined and therefore, can be limiting as other types of independent expert reports may be more appropriate in particular circumstances. A report by a risk specialist may for example be more appropriate than an engineering study in identifying risks arising out of operations and/or identifying causal factors in relation to a serious accident or HPI at the mine.

A further issue concerns the power to give a directive for allegedly contravening the Explosives Act, which is currently reactive. It only applies if it is reasonably suspected that a person is contravening, or has contravened, a provision of the Explosives Act. In contrast the Mining Safety Acts, and the PG Act feature a more proactive approach. Under the Mining Safety Acts a directive can be given if an inspector reasonably believes a risk from mining operations may reach an unacceptable level. Under the PG Act a directive can be given if an inspector reasonably believes a person is involved in an activity that is likely to result in a contravention.

Rationale for government action

Some elements of the current directives frameworks under the Mining Safety Acts, particularly relating to the review of a SHMS and reducing risk, are causing confusion between the regulator and industry. From an operational perspective, there is uncertainty by inspectors and operators at times regarding which type of directive is the most appropriate to give in relation to a particular situation as both are related to managing risks. The legislative ambiguity surrounding these types of directives, particularly in situations where operations are suspended, unnecessarily increases the risk of legal proceedings being needed to resolve the ambiguity and has the potential to detract from the key objective which is to remedy the safety issue. Previous attempts to improve the understanding of directives using an educative approach did not yield the intended outcome, as evident by the continued confusion and legal challenges.

The directive to provide an independent engineering study under the Mining Safety Acts is also too limiting because it does not clearly apply to reports from other experts as relevant or appropriate for the circumstances. In relation to a serious accident or HPI at a mine, an expert report from an independent risk expert, medical doctor, hygienist, etc. may be more appropriate (under the circumstances) than from an engineer.

In relation to the Explosives Act, the reactive nature of directives powers under the Act is out of step with the other three Resources Safety Acts which feature a proactive component; meaning an inspector can act before a contravention occurs under those Acts. A similar proactive directive power under the Explosives Act is considered essential to ensure appropriate action can be taken by an inspector in relation to a potential contravention before it occurs. This is particularly relevant for the Explosives Act, given the substantial risks associated with the potential misuse of explosives.

Objective of government action

The key objective of government action is to improve, clarify, and broaden the directives frameworks under the Mining Safety Acts. Specifically, this is to be achieved through:

1. Broadening directives powers under the Mining Safety Acts relating to an engineering study to apply more generally to allow for other types of expert reports.
2. Providing greater legislative certainty around the form and operation of directives including in relation to the grounds for giving a directive, what is required of the recipient to fulfil a directive, and clarity around how long a directive stays in effect.
3. Streamlining existing directives relating to SHMS and reducing risk to provide a simpler directive framework to reduce current ambiguity around the current four directive types.

A secondary objective is broadening the directive power in relation to the contravention of the Explosives Act under section 102, so the power can also be used proactively where an inspector reasonably suspects a person is involved in an activity that is likely to result in a contravention of the Explosives Act.

Options

Option 1 – Amend legislation

Amend the Mining Safety Acts and the Explosives Act in the following ways. Firstly, to amend the Mining Safety Acts to:

1. Broaden directives powers under section 172 of the CMSHA and section 169 of the MQSHA, which are currently limited to an engineering study, to instead refer to an expert report about a prescribed matter. This would still include an engineering study, but also provide for other types of reports by independent experts to be to be specified.
2. Provide more prescription concerning the minimum content and intended operation of directives including in relation to the grounds for giving a directive (e.g. a directive to

include a statement of reasons including information such as identification of the risk, basis upon which the risk is believed to be at an unacceptable level, summary of evidence upon which belief is based, etc.), what is required of the recipient to fulfil a directive (e.g. could include a requirement to produce evidence to the satisfaction of an inspector to demonstrate an acceptable level of risk has been achieved, or will be achieved, by the proposed actions) and clarity around how long a directive stays in effect or when a directive is considered to have been completed.

3. Streamline the existing four directives relating to SHMS and reducing risk under sections 166, 167, 168 and 169 of the CMSHA and sections 163, 164, 165 and 166 of the MQSHA to provide a simpler consolidated directive framework to reduce current ambiguity around the existing provisions. Note that the proactive nature of the existing directives powers is to be retained. Similarly, no changes are proposed in relation to who can give directives, who directives are to be given to and how directives are to be given.

Secondly, it is proposed to broaden the directive power under section 102 of the Explosives Act to include an additional reason at subsection (1) so the section also applies if an inspector reasonably suspects a person is involved in an activity that is likely to result in a contravention of the Explosives Act. This would involve consequential amendments to subsections (3)(a) and (3)(c) and (4) to account for the expanded application of section 102 to include a likely contravention.

Impacts and benefits

Option 1 could potentially impact individuals and corporations in the coal mining, mining and quarrying and explosives sectors.

Costs	Benefits
There are no direct monetary costs to business, the community or government associated with this option. However, costs associated with complying with a directive are, and would continue to be, borne by the operator or individual where a potential risk or non-compliance requiring action is identified by an inspector (this does not represent a change from the status quo).	Addresses the current ambiguity associated with directives under the Mining Safety Acts by providing a more effective and efficient directives framework under the Mining Safety Acts and provides for proactive directives under the Explosives Act.
Potential increased costs associated with complying with a directive (when compared to the current arrangements) could arise from new broader directive powers - i.e., directives for expert reports (not including an	Broadens directives powers under the Mining Safety Acts to allow for other types of expert reports. This will ensure expert reports on critical safety matters are obtained in a timely manner so potential safety concerns can be

engineering study) and the new proactive directive under the Explosives Act. However, the intent of these directives is aimed at fulfilling existing obligations, the costs of which already must be borne by operators.	identified and addressed to minimise lost productivity.
	Provides greater legislative certainty around the form and operation of directives under Mining Safety Acts including in relation to the grounds for giving a directive, what is required of the recipient to fulfil a directive, and clarity around how long a directive stays in effect.
	The expected improvement in the quality of directives (when given) will benefit both industry and the regulator by providing greater clarity and transparency.
	Streamlines existing SHMS and risk reduction-related directives under Mining Safety Acts to provide a simpler directive framework likely comprising one directive which may be given in relation to stated matters.
	Benefits for both industry and the regulator without imposing additional cost burden.

Option 2 – Status quo (do nothing)

This option maintains the status quo and so will not provide a legislative solution to the three matters identified in relation to the current directives’ frameworks under the Mining Safety Acts and the Explosives Act.

The identified issues relating to broadening the engineering study-related directives to apply instead to expert reports and the current reactive directives power under section 102 of the Explosives Act cannot be achieved by non-legislative means. Therefore Option 2 will not adequately address the identified objectives of government action. Note that a non-regulatory option was not included for this topic because this is not a viable option (i.e., akin to Option 2 in that it would also not adequately address the identified objectives of government action).

If the status quo was to remain there would be continued ambiguity and confusion around existing SHMS and risk reduction-related directives under Mining Safety Acts. The authority for an inspector to issue a directive for obtaining an expert report (other an engineering study) would remain constrained. There would be no authority under the Explosives Act for an inspector to issue a directive proactively to prevent a likely contravention of the Act.

Recommended option

The recommended option is Option 1, under which it is proposed to amend the Mining Safety Acts to enable directives to be given for obtaining expert reports (as opposed to just engineering studies) for prescribed matters, providing greater legislative certainty around the form and operation of directives generally, and streamlining directives relating SHMS and risk reduction, including those associated with suspending operations. It is also proposed to amend the Explosives Act so a directive can proactively be given to address a likely contravention of the Explosives Act.

The proposed changes address the current ambiguity associated with directives under the Mining Safety Acts, will provide for a simpler SHMS and risk reduction-related directive under Mining Safety Acts, enables directives to be given about obtaining expert reports in a mining context and will permit proactive action to address a likely contravention of the Explosives Act. This will benefit both industry and the regulator and is not likely to result in significant additional costs to either.

Contemporary legislation

Contemporary legislation provides the foundation for RSHQ to regulate safety and health effectively and efficiently in relation to resources industry operations. Continuous improvement and updating of legislative frameworks will help to keep this foundation relevant and effective.

Definition of labour hire and employer

Issue

In keeping with modern workforce practices, the mining industry has become increasingly reliant on contractors, labour hire agencies and service providers (refer to Figure 7 - Employee versus contractor worked hours, under the 'Establish site safety and health committee' section). These agencies, as employers, have workplace safety and health obligations. The current legislative framework does not clearly provide for these more contemporary employment arrangements. This means that safety and health obligations may be misunderstood or at worst, disregarded completely.

What is labour hire?

Labour hire works in the following way – A labour hire agency supplies a worker to another organisation (host) and the labour hire agency is the worker's employer, both the labour hire agency and the host have responsibilities to the worker. Although the worker's contract is with the labour hire agency, the worker is under the control of the host while performing work at the host's workplace.

Rationale for government action

Through the BoI it became apparent labour hire agencies, which supply staff for coal mining operations, do not always have a clear understanding of their workplace safety and health obligations.

This issue is further compounded by there being no obligation on either a mine operator or SSE to report the occurrence of injury, HPIs or proposed changes at the coal mine that may affect the safety and health of labour hire workers, to the agency that supplied those workers. This could result in the labour hire agency being unaware of these matters and the impacts on the safety and health of their employees.

The regulator's view is that safety and health obligations already exist in the CMSHA and MQSHA. However, there has been some confusion over the meaning of terms such as contractors, labour hire agencies and service providers which has served to dilute the intent of the legislation and allow alternative interpretations. This has resulted in a distancing of labour

hire agencies, for example, from the operation of the workplace where their employees (i.e., the temporary agency workers) have been placed.

To address this lack of clarity it is proposed to define a 'contractor' in the CMSHA and the MQSHA to include all alternate methods of employment including labour hire and service providers. That will serve to limit any dispute regarding specific obligations and ensures that all workers receive the same protection irrespective of the specific arrangement. It is also proposed that a requirement be imposed on the SSE to inform the management of a contractor (e.g., labour hire agency), when there is an injury or illness to contractor's employee that causes absence from work; an HPI; or any proposed changes that may affect the safety and health of persons at the mine.

The regulator's view is that Part 3 (*Safety and health obligations*) of the CMSHA, included statutory obligations with regard to health and safety which are applicable to labour hire agencies – see in particular section 39 (*Generally application safety and health obligations*), section 43 (*Obligations of contractors*) and section 47 (*Obligations of service providers*). These provisions are replicated in Part 3 (*Safety and health obligations*) of the MQSHA, see in particular sections 36, 40 and 44.

However, the labour hire agencies themselves do not agree. This was evidenced in the recent Bol where it was found that the labour hire agency which supplied staff for a coal mine did not consider that it has any statutory obligations at the mine pursuant to either section 43 or 47 of the CMSHA. It was of the view that the labour hire agency provided labour only, and the workers worked under the exclusive control of the mining company to whom they supplied the labour. The labour hire agency felt they had no control over the workers on site. As such, all the operational risks, were considered the relevant mining company's responsibility.

It is important to note that neither the term 'labour hire worker' nor the term 'contractor' is defined in either of the Mining Safety Acts. Contractors typically perform short-term specialised tasks such as discrete repair or construction tasks as well as ongoing specialised tasks. Contractors often supply their own plant and equipment. Contractors may be substantial organisations, smaller businesses, or self-employed individuals. Contractors' workers are also referred to as contractors. Furthermore, labour hire workers and contractors are often referred to collectively as 'contractors', thereby distinguishing them from workers employed directly and permanently by a mine operator.

It is essential that all those involved in the employment of a worker and who have a level of control over the work environment are held responsible for the health and safety of the worker. This is reflected in both the Queensland and the NSW work health and safety

legislation which are identical with regard to the primary duty of care provisions (see section 19 of the WHSA). However, unlike the NSW version of the WHSA, the Queensland WHSA does not apply to a mine to which either the CMSMA or the MQSHA applies (Schedule 1, Part 2, Division 1, section 2 of the WHSA).

Whilst Part 3 of both the CMSHA and the MQSHA provides for safety and health obligations, the confusion seems to lie in the interpretation of certain terms that are not defined in the legislation and are therefore open to interpretation, that is, a contractor, and a labour hire agency. A definition of service provider is stated as simply ‘A person who provides a service at a mine’. If clear definitions of these terms are provided the safety and health obligations would become explicit and would potentially function in the intended manner.

It would also assist the labour hire agencies to meet their safety and health obligations if there was an obligation on the host (in this case the mine operator or SSE) to inform the agency when there was an injury or illness to a contractor employee (e.g., labour hire agency employee) that causes an absence from work; a HPI; or any proposed changes that may affect the safety and health of persons at the mine.

Source	Evidence
Bol Report, Part II	<p><i>Finding 92</i> - Neither coal mine operators nor Site Senior Executives (SSEs) presently have an obligation to report the occurrence of high potential incidents (HPIs) involving labour hire workers to the labour hire agency that supplied those workers.</p> <p><i>Finding 93</i> - In Queensland, labour hire agencies providing workers to the coal mining industry have no clear and express obligation to ensure that the workplaces into which they send their employees are as safe as reasonably practicable (such as that contained in section 19 of the <i>Work Health and Safety Act 2011</i> (NSW) (the NSW Act)), and may be entirely unaware of the occurrence of incidents that pose a risk of significant adverse effects to the safety and health of those employees. Even if a labour hire agency becomes aware of the occurrence of a reportable HPI, it has no obligation to report it to the regulator.</p> <p><i>Finding 94</i> - The imposition of a safety and health obligation on labour hire agencies which employ coalmine workers, such as that set out in section 19 of the <i>Work Health and Safety Act 2011</i> (Qld) (the WHS Act), would make coal mine operators and labour hire agencies mutually responsible for the safety and health of labour hire workers and add a layer of oversight of safe practices.</p>

Objective of government action

Government action is needed to ensure that safety and health obligations that cover all types of employment arrangement are clearly expressed in legislation.

Options

Option 1 – Amend legislation

The following amendments are proposed for both the CMSHA and the MQSHA.

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 CMSHA 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.

Impacts and benefits

Costs	Benefits
As clarifying amendments, these changes involve no significant costs unless an organisation is not already meeting the appropriate duty of care under the current legislation.	Ensures the definition of contractor covers all types of employment arrangement which has a positive social impact for workers who are employed on a contractual basis, including those recruited through labour hire agencies, and their families in that they can be assured that, whatever their employment status, their

	safety and health will receive appropriate care and attention.
	Compels the SSE to advise specific safety issues to labour hire/contractor agencies and for these agencies to notify the regulator of certain incidents. This will assist the contractor agencies to fulfil their safety and health obligations to their employees by ensuring that they are fully informed regarding the ongoing safety of the workplaces which they send their employees into.
	Labour hire agencies may develop a culture that encourages its workers to report—to its own management—safety and health incidents and concerns. This may lead to the reporting of HPis (that which could have caused a significant adverse effect on the safety and health of a person) that otherwise the regulator may not become aware of.

Option 2 – Status quo (do nothing)

This option would maintain the status quo and would not meet the objectives of government action. As is evidenced by the recent Bol findings there continues to be misunderstandings regarding the intent of the legislation which has led to the avoidance of important safety and health obligations. Other than legislative amendment there are no other ways to provide a clear imperative for relevant entities to meet these obligations.

Recommended option

Option 1 is the recommended option. It is proposed in this option that the definition of ‘contractor’ be amended to be non-exhaustive and include any entity that provides a service, performs work or provides labour to a coal mine. This option would also introduce an obligation for both the SSE and the contractor to ensure that all appropriate entities are fully informed of safety issues.

It is envisaged that these amendments will serve to clarify terms and remove any misconception that a safety and health obligation may not apply to certain entities. This will also ensure that all employers who are responsible for the safety and health of their employees are fully informed of any existing and emerging safety issues that may affect the workplace.

This proposed legislative amendment will benefit the mining industry by providing clarity for all. Any costs would only be borne by organisations who are not already fulfilling their safety and health obligations for their workers, whatever their manner of employment.

The WHS legislation in both NSW and Queensland include primary duty of care provisions that cover these types of employment arrangements. In Queensland, the mining safety legislation was established specifically to cover safety and health in the resources sector, and it is necessary to ensure that the same protection for employees, whatever their employment status, is provided within this legislation. The proposed amendments work within the current legislative framework for mine safety without replicating the WHSA provisions, preserving the necessary distinctions between the two frameworks that ensure the Mining Safety Acts' appropriateness to the high hazard industries to which they apply. This avoids a major redraft of the safety and health obligations established in Part 3 of the Mining Safety Acts and enhances clarity with a broadened definition of contractor that covers all employment arrangements including service providers and labour hire agencies.

Industrial manslaughter

Issue

The offence of industrial manslaughter was introduced in the Resources Safety Acts by the *Mineral and Energy Resources and Other Legislation Amendment Act 2020*. The offence provisions, which are currently in operation, are found in the CMSHA (Part 3A), the MQSHA (Part 3A), the PG Act (Chapter 11, Part 1AA), and the Explosives Act (Part 4A). It is not intended to discuss the issues raised in the development of the *Mineral and Energy Resources and Other Legislation Amendment Act 2020*, which has been passed by Parliament. The industrial manslaughter offences are now in operation.

The issue identified in this current process is that the definition of 'employer' has potential ambiguity in the extent of coverage of the industrial manslaughter offence. Consequently, the industrial manslaughter offence provisions as drafted may include some gaps in meeting objective of the original amendment in the *Mineral and Energy Resources and Other Legislation Amendment Act 2020*³⁸— insofar as it is concerned with ensuring consistency in how deaths of workers on work sites are treated across all industries.

There is some doubt that the current industrial manslaughter offence provisions would cover a coal mine operator when they cause, by criminal negligence, the death of a worker – if there is

³⁸ Explanatory notes to the *Mineral and Energy Resources and Other Legislation Amendment Act 2020*.

a labour-hire agency or independent contractor who employs the worker. The industrial manslaughter offence provisions make an ‘employer’ liable for the negligent death. The definition of employer in the CMSHA is not sufficiently clear and needs to be clarified so that it covers all entities - including the holder, a coal mine operator, a labour hire agency, a contractor or any other person who employs/engages or arranges for a worker to perform work (and a senior person of such an entity). The issue extends to the other Resources Safety Acts as these industrial manslaughter provisions are similar. The need to clarify the issue is reflected in the increasing trend of employing workers through a non-permanent basis, such as contractors from labour hire agencies (refer to Figure 7 - Employee versus contractor worked hours, under the ‘Establish site safety and health committee’ section).

The BoI made findings and recommendations in relation to the industrial manslaughter offence provisions in the CMSHA. The BoI was concerned that the amendments may not reflect Parliament’s intention to extend industrial manslaughter provisions to the CMSHA to ensure consistency in how deaths of workers on work sites are treated (as they are in the WHSA). The intent of the amendments introduced into the Resources Safety Acts by the *Mineral and Energy Resources and Other Legislation Amendment Act 2020* was to address criminal responsibility where a resource sector worker’s death was caused by the criminal negligence of an employer or senior officer of an employer and that maximum penalties were an appropriate deterrent and sanction.

Rationale for government action

Government action is required to ensure the industrial manslaughter offence provisions work as they were intended when industrial manslaughter was introduced by Parliament in the *Mineral and Energy Resources and Other Legislation Amendment Act 2020*.

Source	Evidence
BoI Report, Part I	<p><i>Finding 81</i> - As the explanatory notes to the Mineral and Energy Resources and Other Legislation Amendment Bill 2020 (Qld) suggest, the intention of Parliament in extending industrial manslaughter provisions to the Act was to strengthen the safety outcomes in coal mining and to ensure consistency in how deaths of workers on work sites are treated.</p> <p><i>Finding 82</i> - If the Board’s interpretation of the definition of employer is correct, the amendments to the Act may not reflect Parliament’s intention as to who should be liable to prosecution under Part 3A of the CMSHA.</p>

Objective of government action

The objective of government action is to remove any ambiguity concerning the operation of the industrial manslaughter offences in the Resources Safety Acts and to ensure that the original Parliament intention that there be consistency of how deaths of workers are treated is implemented.

Options

Option 1 – Amend legislation

Legislative amendments to the Safety Resources Acts are proposed to ensure that any entity who may be liable for causing, through criminal negligence, the death of a worker on-site is able to be prosecuted including a coal mine operator, holder, labour hire companies, contractors or any other person who employs/engages or arranges for a worker to perform work (and a senior person of such an entity). The intention is to ensure that each of these entities have been clearly identified in the legislation as possible employers with regard to the industrial manslaughter provisions as this will remove the current ambiguity and achieve Parliament’s original intention of improving safety and treating the death of workers on sites consistently across all industries.

The intention of Parliament was to ensure that the employer and a senior officer which cause the death of a resources sector worker through criminal negligence would be subject to the industrial manslaughter offence provisions and prosecution, regardless of their basis of employment as permanent or contractor. This is further supported in the Explanatory Notes for the industrial manslaughter offence provisions which calls for consistency with the WHSA. Under the WHSA, the offence applies to a person conducting a business or an undertaking, or their senior officer without consideration of the employment basis of that person. The employer and senior officer are subject to the offence because of their role in the business or undertaking. It would be a perverse outcome if industry was to avoid any potential responsibility on the basis of the employment relationship as a contractor. It would also not deliver on the safety outcomes intended by Parliament for the industrial manslaughter offences.

Impacts and benefits

Costs	Benefits
Industry stakeholders are only affected if they have breached the legislation leading to a prosecution.	Removal of any potential ambiguity will ensure the objectives of the original amendment are achieved.

	Clear legislation will ensure that court's time is not wasted interpreting ambiguous provisions in the course of prosecutions.
	It is not anticipated that there will be a significant change in the number of industrial manslaughter proceedings brought before the courts.
	Supports the BoI recommendations.

Option 2 – Status quo (do nothing)

As the issue concerns the clarity and sufficiency of the existing legislative provisions for industrial manslaughter offences, retaining the status quo will mean that the problem is not addressed, and the ambiguity will continue. It was the intention of Parliament to ensure that an employer and a senior officer of an employer which negligently cause the death of a resources sector worker would be subject to the industrial manslaughter offence provisions and prosecution. Leaving the legislative provisions as they currently are would not meet this intention nor that of the BoI recommendations.

Recommended option

Option 1 is the recommended option. It is proposed to amend the Resources Safety Acts to ensure that industrial manslaughter offences apply to whomever employs/engages or arranges for a worker to perform work and whose criminally negligent conduct caused the death of the worker (and a senior officer of such an entity). This may include a mine operator (this would be excluded for the PG Act and the Explosives Act), a holder, a labour hire agency or a contractor (and a senior person of such an entity). The intention is to ensure that each of these entities have been clearly identified in the legislation as possible employers with regard to the industrial manslaughter provisions. This change will ensure that the appropriate person/entity in cases where criminally negligent conduct causes the death of a worker is able to be prosecuted (either jointly or severally).

It is noted that all Resources Safety Acts include the term 'holder' and the definition of holder under each Act covers the entities that hold the licence, permit or other authority that allows activities to be undertaken in the relevant resources industry.

The amendment will create certainty and remove any potential ambiguity. It will not alter any other components of the industrial manslaughter provisions. It will only impact industry if they cause the death of a worker by criminal negligence. The legislative intent underpinning the offence of industrial manslaughter is to adequately address the degree of criminal responsibility evident in the worst category of cases and this proposal will only serve to strengthen that.

Consultation questions

HAVE YOUR SAY

QUESTION 15: Is it a reasonable view that whoever employs/engages or arranges for a worker, and whose criminally negligent conduct causes the death of the resources sector worker, should be considered (either jointly or individually) liable for industrial manslaughter?

Have your say using the submission template

Remote operating centres

Issue

Operators of coal mines in Queensland are increasingly utilising remote operating centres (ROCs) as part of their mining operations. ROCs are an emerging approach to managing operations in the resources sector whereby ROC workers, who are not located at the mine site but can be interstate or even overseas, provide instructions and issue directions to coal mine workers at Queensland coal mines in relation to coal mining operations.

The CMSHA creates obligations for a person who may affect safety and health at coal mines or as a result of coal mining operations and this would apply to off-site supervisors giving instructions to coal mine workers on site. A person on whom a safety and health obligation is imposed must discharge the obligation and penalties are provided for failing to do so. However, workers at ROCs are not appointed as supervisors or hold a designated statutory role under the mines SHMS. Workers at ROCs are not on site and are unlikely to have been inducted at the mine site. Moreover, they may not be familiar with the mine site environment, including the site's particular hazards, yet they can carry out a wide variety of functions in relation to operations at coal mines which effectively make them off-site supervisors. This could include giving directions to mine site workers regarding the movement of machinery at the mine.

These operating arrangements have the potential for instructions being given to on site coal mine workers, in the absence of a sufficient understanding of the particular hazards at the relevant mine, or a sufficient understanding about the particular requirements of the relevant mine's SHMS. There is a potential increase in the risk of accidents, including serious accidents and HPIs, when remotely giving instructions that affect safety.

Rationale for government action

The rationale for government action is to bolster safety in these sorts of operations. How ROCs operate currently poses a potential increased risk to the safety and health of workers. This is because ROC off-site supervisors may not be inducted into the mine site, not covered in the SHMS, may not report to the SSE and are not specifically recognised in the legislation.

Objective of government action

The objectives of government action are to facilitate industry's use of modernised operational practices via ROCs whilst ensuring that the safety and health of workers is protected under these types of operations.

Options

Option 1 – Amend legislation

It is proposed to amend the CMSHA to clarify the obligations for off-site supervisors, that is ROC workers who give directions to coal mine workers at the mine. This would include clarifying safety and health obligations, the role of off-site supervisors in SHMS, requirements for training, induction and competency requirements. Consequential amendments would be considered for the CMSHA and the CMSHR as a result of these proposals.

The following areas have been identified for amendment.

Safety and health obligations

Section 39(1) of the CMSHA provides for the safety and health obligations of persons generally and applies to a coal mine worker or other person at a coal mine ***or a person who may affect the safety and health of others at a coal mine as a result of coal mining operations.***

Consequently, the CMSHA creates obligations for a person who may affect safety and health at coal mines or as a result of coal mining operations. So, if a person at a ROC was issuing instructions to a coal mine worker and that was affecting safety and health at coal mines, a safety and health obligation under the CMSHA exists. A person on whom a safety and health obligation is imposed must discharge the obligation and penalties are provided for failing to do so.

It is proposed to clarify that the requirements in section 39(2)(b), (d) and (f) of the CMSHA which apply to a person at a coal mine would also apply to a person located off-site who may

affect the safety and health of others at a coal mine by giving directions to a coal mine worker (i.e., an off-site supervisor). This would include requirements for:

- Work and activities under their control, supervision or leadership to be conducted in a way not to expose a worker or others to an unacceptable level of risk;
- Complying with instructions for safety and health by a coal mine operator, SSE or a supervisor;
- To not do anything wilfully or recklessly that might adversely affect safety and health of someone at a mine.

SHMS

It is proposed to clarify SHMS provisions (e.g., section 62 of the CMSHA) so that it is clear that a mine’s SHMS needs to also address directions given to a coal mine worker by a person not located at the mine site (i.e., an off-site supervisor).

Training, induction and competency

It is proposed to clarify that off-site supervisors giving a direction to a coal mine worker must have already received on-site induction and training before they give such directions. They also need to be competent and have relevant competencies in the areas on which they are to give instructions.

Consequential amendments

In addition, consequential amendments are proposed to be progressed to the CMSHA and the CMSHR as a result of the above proposals.

Impacts and benefits

Costs	Benefits
Industry will need to ensure ROC workers (off-site supervisors) understand their safety and health obligations.	Substantial benefit in clarifying safety obligations that apply to ROC workers (off-site supervisors).
On-site training and induction will be required for off-site supervisors. These costs arguably should already exist as off-site supervisors already have safety and health obligations under the CMSHA (including to take reasonable action to ensure anyone is not exposed to an unacceptable level of risk) and should be undertaking this training now.	ROC workers will understand their safety and health obligations.

SHMS will need to provide for off-site supervisors. This should not be a significant change for industry.	The legislation will be clearer and hence more effective. It will provide improved protection for the safety and health of workers and facilitate enforcement activities.
Costs on industry are unlikely to be significant.	

Option 2 – Status quo (do nothing)

Under this option, no legislative changes would be made, and industry will continue to operate as it currently does. There will still be a potential increased risk to the safety and health of workers as the use of ROC grows. Taking no action poses a reputational risk for industry and the regulator given that the potential for safety risks has been identified.

Recommended option

Option 1 is the recommended option.

While the legislation contains existing safety and health obligations which would apply to off-site supervisors who give instructions to mine workers on site, ROCs introduce further operational complexity. In order to ensure that the safety and health of workers are sufficiently protected, it is necessary to clarify the safety and health obligations for ROC off-site supervisors. This promotes HRO principles of sensitivity to operations and deference to expertise, by ensuring that ROC workers have a realistic appreciation of conditions at the site with which they are interacting and are appropriately involving statutory position-holders in decision-making.

Modernised operational practices such as ROCs allow operations to be more efficient, however, that efficiency should not come at a cost of safety in the industry and this proposal will ensure that safety remains paramount.

Consultation questions

HAVE YOUR SAY	
QUESTION 16:	Should the MQSHA also be amended to clarify coverage of the MQSHA for off-site supervisors. If so, what if any differences to the ROC proposal should be made for the MQSHA?
QUESTION 17:	Should there be a requirement in the CMSHA that persons in safety critical roles must be located at a mine site e.g., an SSE, UMM and ventilation officer?
<i>Have your say using the submission template</i>	

A contemporary board of examiners

Issue

The BoE is a Government Board established under a Queensland Act of Parliament. As such the board should be conducted in accordance with Queensland government's good governance standards as outlined in the document: **Welcome Aboard: A guide for members of Queensland Government Boards, committees and statutory authorities** developed by the Department of Premier and Cabinet (DPC). Page five of this guide states the following:

"Ministers are responsible to Parliament for the operation of all Government Boards and agencies within their portfolios. The authority of a Minister to give directions to a board is sometimes specified in the enabling legislation, or in the absence of enabling legislation, the terms of reference or constitution."³⁹

Neither the CMSHA nor the MQSHA specifies that the Minister can give directions to the board.

This handbook also provides guidance in relation to government board composition, including members skills, attributes and expertise. In particular, it highlights the need to have people with appropriate skills and experience and that ideally, a board should have a diverse set of members with a blend of expertise, experience and range of perspectives.

According to the Mining Safety Acts all board members must have a minimum of 10 years practical experience in the mining industry and holding certificates of competency. However, despite the board being responsible for developing and overseeing the assessment of competencies, there is currently no requirement for someone with this expertise to be appointed to the board.

Over time and given the structure of the current board, some questions have arisen regarding the capacity of the board to work independently of both the regulatory body (i.e., RSHQ) and the Queensland mining industry. Currently the board does not have an independent chairperson and, according to legislative requirements, an inspector (appointed under either of the Mining Safety Acts) must be chairperson.

³⁹ Department of the Premier and Cabinet, *Welcome Aboard: A guide for members of Queensland Government Boards, committees and statutory authorities*, page 5.

Rationale for government action

The Mining Safety Acts tasks the BoE with the duties of determining and assessing the competencies required to fulfil statutory functions within the mining industry and ensuring consistency in approach with other jurisdictions. The BoE has a history of working towards providing a safe working environment in both surface and underground mines by ensuring that key mining personnel are not only qualified but are competent in dealing with the potential hazards associated with mining.

Governance

Neither the CMSHA nor the MQSHA specifies that the Minister can give directions to the BoE. Being a long-standing board, it is timely for its functionality and effectiveness to be examined and any efficiencies and operational improvements identified and implemented. One of the identified issues is the lack of executive control despite the Minister being responsible for the operation of government boards within the Ministerial portfolio.

It would be appropriate for the BoE to maintain its independence regarding issuing or granting of notices, certificates and registrations. Constraining this independence would likely undermine the Board's confidence in making critical decisions and discourage participation on the Board.

Structure

The size, composition, and skill set of a public sector board must be appropriate to effectively fulfil its statutory obligations. In accordance with the Mining Safety Acts all board members to have a minimum of 10 years' practical experience in the mining industry and hold a certificate of competency under one of the Mining Safety Acts, as well as the need for certain members to hold a first class certificate of competency for each of the two underground mine types (i.e., coal and metalliferous).

In order for the BoE to work independently of both the regulator and the Queensland mining industry it would be preferable for an independent chairperson to be appointed. An independent chairperson would be better positioned to ensure interaction between members remains relevant, productive and focussed towards achieving the BoE's objectives. A neutral chairperson would also help to minimise or diffuse potential tension where there are disparate views and ideas.

There is also need for at least one board member to have expertise in determining and assessing competencies, the board's primary role. Despite the BoE being responsible for

developing and overseeing the assessment of competencies, there is currently no requirement for someone with this expertise to be appointed to the board. The BoE's role is to decide competencies necessary for holders of certificates of competency, set exams and issue certificates of competency and SSE notices to people who want to work in statutory positions in the metalliferous and coal mining industries in Queensland. The BoE also has an important role in ensuring that Queensland competencies are consistent with other jurisdictions.

Contemporary trends in learning and assessment of competence are constantly evolving. In the current environment, where mining safety is a concern, it would be prudent that decisions concerning the assessment of competence are well-informed.

Objective of government action

The objective of this proposal is to ensure that the BoE framework follows 'best practice' and aligns with the handbook for Queensland Government Boards developed by the DPC as well as following good governance principles such as in the Australian Institute of Company Directors' guiding principles of good governance.

Options

Option 1 – Amend legislation

It is also proposed that amendments be made to the CMSHA and MQSHA so that it is explicit that the BoE is subject to the direction and control of the Minister. This would not include the decisions that the BoE makes with respect to the issue or grant of notices, certificates and registrations.

This proposal is similar to the legislative framework for other government boards⁴⁰ which are subject to the direction of the Minister with the exception of decisions made by the board regarding administrative functions such as registrations, certifications etc.

Precedent for this approach also exists in NSW Work Health and Safety mining legislation⁴¹ whereby the NSW Mining and Petroleum Competence Board is subject to the control and direction of the Minister.

⁴⁰ Such as the Surveyors Board of Queensland (Part 2 of the *Surveyors Act 2003*), the Board of Architects of Queensland (Part 5 of the *Architects Act 2002*) and the Board of the Queensland College of Teachers (Chapter 10 of the *Education (Queensland College of Teachers) Act 2005*).

⁴¹ Section 64 of the *Work Health and Safety (Mines and Petroleum Sites) Act 2013*.

It is also proposed that the membership and conduct of BoE provisions be amended to provide for the following:

- The chairperson is independent of both the regulator and the Queensland mining industry.
- At least one member of the BoE must have demonstrated experience and proficiency with contemporary practices in assessing competence and need not hold a certificate of competency.

Impacts and benefits

The proposed amendments to the structure of the BoE to ensure that there is an independent chairperson and a member of the board with competency assessment experience will provide improved accountability and assurance that key mining personnel are competent. The BoE undertake an essential role, working towards providing a safe working environment in mining. Their vision is to deliver competent statutory officials to the industry who can contribute to an industry achieving zero serious harm. It is the role of the BoE to ensure that key mining personnel are not only qualified, but also competent in dealing with potential hazards associated with mining. With the Minister being responsible for the operation of the BoE, it is prudent to ensure that this aspect of the BoE’s governance is legislated.

With the chairperson responsible for leading and directing the activities of the BoE as well as the need for a board member who is skilled in the assessment of competencies, the ideal candidate for the independent chairperson would have substantial experience with corporate governance and certificate of competency schemes or work, health and safety legislation.

Costs	Benefits
<p>The costs of running the BoE would not increase significantly. Any inspector on the BoE is not entitled to the remuneration for their role. The remuneration for board members is \$500 per meeting while for the chairperson it is \$650, for meetings of duration of four hours or greater. In the financial year 2019-20 the total amount incurred by the board for meeting attendance fees was \$31,863. Expenditure for travel and related meeting expenses was \$27,483. The remaining \$4,380 was remuneration claimed by board members in accordance with their entitlements.</p>	<p>The BoE will have enhanced accountability and transparency along with improved governance.</p>

	Will provide greater certainty that key mining personnel will be qualified and competent in dealing with potential hazards associated with mining.
	An independent chair would be better positioned to ensure interaction between members remains focussed towards achieving the board's objectives, given there may be disparate views from different members from government and industry.

Option 2 – Status quo

This option would not allow the objective of meeting 'best practice' outlined in the Australian Institute of Company Directors' guiding principles of good governance nor the handbook for Queensland Government Boards developed by DPC. This could potentially affect the BoE reputation as an independent and impartial board.

The Minister's direction and control over the BoE could be included in the terms of reference for the board, however without the enabling legislation there would be no compulsion for the Board to do this. Ideally the Minister's authority to give directions should be both legislated and covered in the terms of reference for the board.

Careful consideration of potential board members competencies may go some way towards meeting 'best practice' if suitable candidates also possess the mining prerequisites however it is both unlikely that such a candidate exists and, if not specifically required by legislation, it is not guaranteed that such a candidate would be chosen.

Recommended option

It is proposed that Part 10 of the Mining Safety Acts be amended to make it explicit that the BoE is subject to the direction and control of the Minister. It is proposed that this power be limited to the way in which the Board is to administer its statutory functions rather than in relation to how it makes decisions with respect to the issue or grant of notices, certificates and registrations.

Precedent for this proposal exists in both Queensland and NSW legislation with the NSW work health and safety mining legislation (section 64 of the *Work Health and Safety (Mines and Petroleum Sites) Act 2013*) stating that the NSW Mining and Petroleum Competence Board is subject to the direction and control of the Minister.

To ensure that the board operates with maximum efficiency and is beyond reproach with its structure, governance and performance, the following amendments are proposed to the structure of the board outlined in the Mining Safety Acts:

1. The appointment of an independent chairperson.
2. The appointment of a person to the BoE with demonstrated expertise or experience in the assessment of competence without having to hold a certificate of competency.

Consultation questions

HAVE YOUR SAY

QUESTION 18: Is demonstrated expertise or experience in the assessment of competencies seen as an essential skill set for at least one member of the BoE? Why or why not?

QUESTION 19: Is it important to have a chairperson of the BoE who is independent of both the Queensland government and the mining industry? Why or why not?

Have your say using the submission template

Consistency of Resources Safety Acts

The RSHQ Act commenced on 1 July 2020, establishing RSHQ as an independent statutory body responsible for regulating worker safety and health in Queensland's resources industries. RSHQ is responsible for administering safety and health legislation applying to Queensland's resources industries under CMSHA, MQSHA, Explosives Act and PG Act. While the resources sector is diverse there are also many commonalities between and within the different industries. Ensuring consistency across the resource safety and health legislative framework provides stability and certainty for the entire sector wherever possible whilst retaining the flexibility to respond to specific industry requirements.

Court jurisdiction for prosecutions

Issue

The Resources Safety Acts have differences in relation to which court deals with proceedings for offences (prosecutions) and the consequent appeals from these decisions. Below is a brief overview of how each of the Acts deals with matters:

- *Coal Mining Safety and Health Act 1999* - A prosecution for an offence against this Act is by way of summary proceedings before an industrial magistrate (see section 255). Note that this excludes industrial manslaughter.
- *Mining and Quarrying Safety and Health Act 1999* - A prosecution for an offence against this Act is by way of summary proceedings before an industrial magistrate (see section 234). Note that this excludes industrial manslaughter.
- *Petroleum and Gas (Production and Safety) Act 2004* - Proceedings for an offence against this Act, are to be heard and decided summarily (see section 837). Therefore, the prosecution would be heard before a Magistrates Court. Note that this excludes industrial manslaughter.
- *Explosives Act 1999* - A proceeding for an offence against this Act, must be taken in a summary way under the *Justices Act 1886* (see section 118). Therefore, the prosecution would be heard before a Magistrates Court. Note that this excludes industrial manslaughter.

The result of these provisions is that CMSHA and the MQSHA provide that prosecutions for offences under those Acts are by way of summary proceedings before an Industrial Magistrate. This allows for an appeal right to the Industrial Court (section 556 of the *Industrial Relations Act 2006*). However, a further appeal to the Court of Appeal can only be made on the grounds of error of law; or excess, or want, of jurisdiction (section 554 of the *Industrial Relations Act 2006*).

In contrast, the Explosives Act and PG Act have prosecutions heard under the mainstream court system which ensures that there are rights of appeal from the Magistrates Court to District Court, and on to the Court of Appeal and High Court.

Rationale for government action

Grater consistency in the court jurisdiction for prosecutions and appeal rights for defendants and the regulator across the Resources Safety Acts and the WHSA is the driver for the reforms. Greater consistency would provide a more equitable approach. Currently it is only the Work Health and Safety Prosecutor who brings proceedings for serious offences under the Resources Safety Acts and may also bring proceedings for other offences as well.

Source	Evidence
Previous consultation	<p>In the 2013 CRIS, alignment of court jurisdiction was raised as a proposal. There was support for matters to be heard by a magistrate under the <i>Justices Act 1886</i> (Qld) because it removes the difficulties inherent with specialist courts. The majority of responses to the RIS supported the proposal of moving mining safety and health proceedings away from the Industrial Magistrates’ jurisdiction to mainstream courts and appeals.</p> <p>At the time these amendments did not proceed however, it is proposed to proceed with these amendments under the current CRIS.</p>

Objective of government action

The objective is to ensure that there is consistency in which courts hear prosecutions under the Resource Acts and to provide equitable appeal rights for all defendants for Resource Act prosecutions.

Options

Option 1 – Amend legislation

It is proposed that amendments are made to the CMSHA and MQSHA to move prosecutions away from the Industrial Magistrates’ jurisdiction to the Magistrates Court. This would result in prosecutions (excluding industrial manslaughter offences, which are heard in the District Court) under the Resources Safety Acts being heard in the Magistrates Court and would provide for all appellants to have the same appeal rights through the court hierarchy.

By doing this, the Resources Acts will align, all defendants will have the same appeal rights and there will be alignment with the WHSA. The proposed amendments work within the current

legislative framework for mine safety without replicating the WHSA provisions, preserving the necessary distinctions between the two frameworks.

It is usual practice for summary offences across legislation to be heard by the Magistrates Court and therefore it is logical that offences against the Resources Safety Acts, which are summary in nature (excluding industrial manslaughter offences) are heard in the same manner by the Magistrates Court.

Impacts and benefits

The proposed amendment will only impact those who have contravened the relevant legislation.

Costs	Benefits
There will be no increased costs to Government as RSHQ is part of the State of Queensland and therefore no payment of filing fees is required.	Provides a consistent court jurisdiction for prosecutions across the Resources Safety Acts and with the WHSA.
Professional costs incurred by the regulator or a defendant will depend on the nature of the matter (for example the complexity or technicality may influence the costs). Whilst there is a scale of costs for the Magistrates Court, there is discretion for costs to be awarded above the scale for cases that involve special difficulty or complexity. Costs can be awarded in the Industrial Magistrates Court also and the extent of these costs would similarly be dependent on the complexity involved for the matter.	Ensures that regardless of which of these Acts a prosecution arises under, they will all have the same appeal rights.

Option 2 – Status quo (do nothing)

No action will involve maintaining the status quo and will not resolve the issue of inconsistent legislative provisions across the Resources Safety Acts and the inequitable appeal rights under the different Acts. This identified issue can only be resolved through legislative amendments and therefore it is not feasible to proceed with this option as it will not meet the policy objectives.

Recommended option

Amending the CMSHA and the MQSHA so that prosecutions are heard before the Magistrates Court (excluding industrial manslaughter, which is heard in the District Court) will align these

Acts with the Explosives Act, the PG Act and the WHSA. This approach will ensure consistency for all litigants and a consistent resource safety legislative framework in relation to the jurisdiction of prosecutions. This will also align with other legislative approaches in relation to the way that summary offences are usually heard. Finally, this approach will also achieve equity in the appeal options available to litigants.

Commencement of offence proceedings

Issue

There is a lack of consistency across the Resources Safety Acts in relation to the timeframes for commencing criminal prosecutions (excluding industrial manslaughter). This has resulted in the commencement timeframes varying greatly based on which Act a prosecution was commenced under.

In some instances, the timeframe for commencing a prosecution is only linked to a timeframe for when a matter comes to the notice of a complainant – like the PG Act. In other instances, there is also an alternate timeframe for commencing a prosecution that refers to a time after the commission of an offence as shown below.

- CMSHA, section 257 and MQSHA, section 236 – the latest of the following periods to end: one year after the commission of the offence or six months after the offence comes to the complainant’s knowledge, but within three years after the commission of an offence.
- Explosives Act, section 118(6) – a proceeding may be started within the latest of the following periods to end:- one year after the offence is committed or one year after the offence comes to the complainant’s knowledge, but within two years after the offence is committed.
- PG Act, section 837 (6) – two years after the offence comes to the notice of the complainant.

The PG Act approach is in alignment with the WHSA (under section 232).

Rationale for government action

It is inequitable to have different timeframes for commencing prosecutions under the Resources Safety Acts. Prosecutions under the Resources Safety Acts concern serious accidents and fatalities and require complex investigations. Therefore, sufficient time for conducting complex investigations to obtain the necessary evidence to commence proceedings is paramount to a potentially successful outcome. Successful prosecutions provide a deterrent

effect as well as justice for the families of injured or deceased workers. It should not be the case that whether charges can be laid, and a successful prosecution potentially carried out – that the process is inadvertently determined by an arbitrary timeframe in the Resources Safety Act that the offence occurred under.

Objective of government action

The objective is to have consistent timeframes for the commencement of prosecutions across the Resources Safety Acts. This will provide equity for defendants and means decisions to prosecute are not affected arbitrarily by time limitations. It will also ensure that there is sufficient time to conduct complex investigations.

Options

Option 1 – Amend legislation

It is proposed to amend the Mining Safety Acts and the Explosives Act to ensure consistent timeframes for commencing prosecutions across all of the Resources Safety Acts. These amendments will provide a time period to commence a prosecution within two years of the offence coming to the notice of the complainant. This proposed change is also consistent with the WHSA. The proposed amendments work within the current legislative frameworks for mine safety and explosives safety without replicating the WHSA provisions, preserving the necessary distinctions between these frameworks that ensure the appropriateness to the high hazard industries to which the Mining Safety Acts and the Explosives Act apply.

It is not intended to amend the time period relating to an offence involving a breach of an obligation causing death and the death is investigated by a coroner. There is already a consistent two-year timeframe to commence proceedings across the Resources Safety Acts where there is a death that is investigated by the coroner.

Impacts and benefits

Stakeholders will only be affected if they have potentially breached the legislation and therefore subjected to prosecution.

Costs	Benefits
There are no significant economic, social or environmental impacts.	Consistency and alignments across the Resources Safety Acts resulting in a more equitable approach.
	Allows sufficient time to gather evidence and undertake a robust investigation which

	increases the likelihood of successful prosecutions.
	Successful prosecutions act as a deterrent for future actions leading to improved safety and health outcomes.

Option 2 – Status quo (do nothing)

If the status quo is to be maintained there will be a failure to have consistent provisions in relation to the commencement of prosecutions. This will retain an inequitable approach. If serious accidents and fatalities are not prosecuted due to arbitrary timeframes to commence a prosecution, there will be no deterrent and safety and health outcomes will not be improved. If sufficient time is not available to gather appropriate evidence prosecutions will be compromised. As a result, maintaining the status quo could also significantly impact the injured worker or the family of a deceased worker.

Recommended option

The proposed timeframe amendments to the Mining Safety Acts and the Explosives Act to align with the PG Act (within two years of the notice of the complainant) will ensure that there is consistency, equity and alignment across the Resources Safety Acts. This will enable robust investigations to be undertaken into serious accidents and fatalities as well as successful prosecutions that will act as a deterrent and provide justice for the workers and their families. These amendments will facilitate improved safety and health outcomes.

Maximising reporting of safety incidents – protection from reprisals

Issue

Reporting safety issues is considered paramount to building a good reporting culture. Protection from reprisals for workers should they raise a safety concern has been built into the Resources Safety Acts. 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. The same level of penalty is not found in the Explosives Act and the PG Act, where this protection is equally important.

Additionally, the current offence provision is ambiguous, lacking a clear definition of the word ‘detriment’ which is fundamental to the application of the provision.

Rationale for government action

To help improve safety outcomes throughout the mining sector, more than 52,000 mine and quarry workers joined management and union representatives attending 'Safety Reset' sessions during July and August 2019. This attendance represents more than 95 per cent of Queensland's mine and quarry workforce. One of the notable themes identified in this survey, was that safety concerns could not be raised without fear of reprisal.

The Brady Review emphasised the need to report safety issues in keeping with HRO theory which considers a safety culture to be a reporting culture. The Brady Review indicated that there is under-reporting of safety and health incidents and a need to maximise the probability of reporting.

The BoI Report (Part I) also supports the adoption of the principles of HRO theory by the mining industry as a whole. This report contains substantive recommendations for the improvement of safety in Queensland coal mines and many of these recommendations rely on adequate reporting. Part II of the BoI Report is even more explicit regarding encouraging reporting of safety issues and the need to negate fears of reprisal, that is, someone causing detriment to another person, because they believe that the person has made a safety complaint.

Part II of the Report includes Recommendation 29, regarding the application of the reprisal offence that exists in the CMSHA with a view to strengthening protections for workers. The recommendation suggests that strengthening this provision may involve including a definition of 'detriment'.

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.

Source	Evidence
BoI Report, Part II	<p><i>Finding 96</i> - The term 'detriment' in sections 275AA and 275AB of the Act is not defined.</p> <p><i>Finding 97</i> - Prompt and thorough investigation of reprisal complaints, and the provision of appropriate feedback to complainants, will reassure workers generally that such complaints are taken seriously, and will also enhance the prospects of success in a prosecution.</p>
Safety Resets	To help improve safety outcomes throughout the mining sector, more than 52,000 mine and quarry workers joined management and union representatives attending 'Safety Reset' sessions during July and August 2019. This attendance represents more than 95 per cent of Queensland's mine and quarry workforce. One of the notable issues identified, was that safety concerns could not be raised without fear of reprisal.
State Development, Natural Resources and Agricultural Industry Development Committee (the Committee)	In its report on the Mineral and Energy Resources and Other Legislation Amendment Bill 2020, the Committee considered that there was a need to ensure that workers felt safe to make safety complaints, without reprisal action being taken. The committee also formed the view that to ensure there is consistency in protection of the safety and health of all workers across all Queensland industries the penalty for reprisal action under CMSHA and MQSHA should align with the reprisal provisions in the WHSA.

Objective of government action

The key objective for government action is to ensure that the current protection from reprisals afforded to all workers in the resources sector is clear and unambiguous. 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. Increased reporting supports improved safety and health outcomes in the resources sector and is in keeping with HRO theory.

Options

Option 1 – Amend legislation

To achieve consistency across the suite of resources safety legislation it is proposed that the penalties for the same offence in both the Explosives Act and the PG Act be amended to increase the currently prescribed 40 penalty units to 1,000 penalty units.

It is proposed that a definition of ‘detriment’ be provided to ensure the meaning of the current provisions for reprisal offences across the Resources Safety Acts is clear. Without the inclusion of a clear definition of ‘detriment’, the provision will remain ambiguous and difficult to enforce.

There are several different definitions of ‘detriment’ found in contemporary government legislation; however, perhaps the most applicable and one that is widely accepted is contained in the *Public Interest Disclosure Act 2010* (Qld) where the definition of detriment includes:

- a) Personal injury or prejudice to safety; and
- b) Property damage or loss; and
- c) Intimidation or harassment; and
- d) Adverse discrimination, disadvantage or adverse treatment about career, profession, employment trade or business; and
- e) Financial loss; and
- f) Damage to reputation, including, for example, personal, professional or business reputation.

Impacts and benefits

Costs	Benefits
Obligation holders will only incur a higher penalty if there is noncompliance. The courts maintain the discretion to impose appropriate penalties depending on each individual case.	Strengthening the maximum penalties for reprisals has the benefit of deterrence due to potentially higher penalties.
	Clearly defining ‘detriment’ will further strengthen the provision and ensure clarity.
	The social impact of strengthening these provisions is positive with workers feeling confident in reporting safety issues without fear of reprisal. A greater deterrence for reprisals will potentially lead to an increased level of reporting and therefore improved safety outcomes.
	Consistent reprisal offence penalties of 1,000 penalty units in the Explosives and PG Acts will ensure that workers across the resource sector operations have the same level of protection from reprisal actions, if they raise safety complaints.

Option 2 – Status quo (do nothing)

If the status quo is to be maintained the inequitable approach across Resources Safety Acts will be retained and the lack of clarity in the provision will continue.

Non-legislative approaches such as raising awareness through training, safety resets and enhancing safety outcomes in workplaces will also be implemented however, without ensuring that workers are adequately protected from reprisals, the issue will remain.

Recommended option

The recommended option is amending the legislation as described in Option 1. This will attain consistency across resources safety legislation and strengthen the offence provision. An appropriate deterrence to reprisals for reporting safety issues will ultimately lead to an improved reporting culture across the resources sector.

Consistent board of inquiry offence provisions

Issue

The board of inquiry offence provisions are inconsistent across the Resources Safety Acts. A review of this legislation in 2020 identified inconsistent penalty provisions and additional provisions in individual Acts that are equally relevant to the other Resources Safety Acts.

A whole of Government review led by Department of Justice and Attorney-General in 2020 also identified provisions in the Explosives Act and the PG Act that are incompatible with some human rights provisions of the HR Act.

Rationale for government action

Provision for providing false or misleading statements or document to a board

Sections 73 and 74 of the Explosives Act and section 721 of the PG Act establish an offence for providing false or misleading statements or documents to an inquiry - maximum penalty of 200 penalty units under the Explosives Act provisions and 500 penalty units under the PG Act. Neither of the Mining Safety Acts contain equivalent provisions.

Like the Explosives Act and the PG Act, the Mining Safety Acts have offence provisions for providing false or misleading statements or documents to an inspector/inspection officer/authorised officer/industry safety and health representative. Members of the board of inquiry do not hold these positions, therefore this offence would not apply to an inquiry

conducted under the Mining Safety Acts.

It should be noted that offences for providing false and misleading statements or documents to an inspector or similar carry a maximum penalty of 100 penalty units for all Resources Safety Acts except the Explosives Act, which has a maximum penalty of only 20 penalty units.

Provision for not impeding or obstructing the board

The “Contempt of board” provision under section 75(c) of the Explosives Act provides that a person must not impede or obstruct the board in the exercise of its powers. The CMSHA (section 217), MQSHA (section 214) and PG Act (section 722) do not contain an equivalent provision. Contempt provisions for other Queensland judicial and review authorities under the *Magistrates Court Act 1921*, the *Commissions of Inquiry Act 1950* and the *Queensland Civil and Administrative Tribunal Act 2009* include an equivalent provision.

Differing penalties

The offence for providing false or misleading statements or document to a board carries a maximum penalty of 200 penalty units in the Explosives Act and 500 penalty units in the PG Act.

The board of inquiry contempt provision is a maximum penalty of 30 penalty units in the CMSHA and the MQSHA. In the Explosives Act and PG Act the maximum penalty is 200 penalty units. Contempt includes interrupting, impeding or obstructing, creating or continuing a disturbance, or anything else that would be contempt of a court if the board of inquiry were a judge acting judicially.

Finally, offences by witnesses at a board of inquiry are prescribed a maximum penalty of 200 penalty units in the PG Act (section 718), while in the Explosive Act (section 72) the maximum penalty is 40 penalty units. For the equivalent offence in the CMSHA (section 216) and the MQSHA (section 213), a maximum penalty of 30 penalty units is prescribed.

Given that all Resources Safety Acts have similar provisions for the establishment and conduct of a board of inquiry it would be highly desirable that the same offence provisions carry the same penalties across the Resources Safety Acts. The proposed penalties are detailed in Table 8 (below).

Table 8 - List of offences and maximum penalties applicable

Offence	Maximum penalty
False or misleading statements or documents to board	500 penalty units
Contempt of Board: Interrupt; impede or obstruct; create or continue a disturbance; do anything that would be contempt of court of the board were a judge acting judicially.	200 penalty units
Offences by witnesses: Attend; continue to attend; take an oath; answer a question or produce a document.	200 penalty units

It is also proposed that the maximum penalty prescribed for providing “false or misleading information” to inspectors or authorised persons in the Explosives Act be increased to 100 penalty units to ensure parity with all other Resources Safety Acts.

Incompatibility with human rights

Both the Explosives Act (section 75(a)) and the PG Act (section 722(a)) provide that a person must not insult a board of inquiry. The provision limits the freedom of expression because an insult is a subjective consideration and a statement/action/omission that is a cultural or social expression relevant to the person may be considered an insult without any intent by the party to injure the ‘insulted’ board member.

The purpose of the provision is to ensure there is due respect for the operation of a board of inquiry.

On balance, the importance of the purpose does not seem to outweigh the significant impact on the human right and alternatives could be considered. Particularly, while ensuring respect for the operation of a board of inquiry is a proper purpose, the balance of sections 75 and 722 (without subsection (a)) achieves this. Other elements included in the contempt section sufficiently achieve the purpose without a significant impact on the right to freedom of expression.

Objective of government action

The objective of government action is to have consistent and contemporary offence provisions that relate to the conduct of a board of inquiry established under any one of the Resources Safety Acts administered by RSHQ.

Options

Option 1 – Legislative amendment

It is proposed to amend the Resources Safety Acts to replicate the Explosives Act provision to not impede or obstruct the board in the exercise of its powers.

It is proposed to increase the penalties discussed above to the level in the most contemporary of the suite of Resources Safety Acts (refer Table 8 above) which reflects the seriousness of the offences and the importance that the government has placed on this type of inquiry.

It is proposed to remove the provisions which refer to insulting the board of inquiry from the Explosives Act and the PG Act.

Impacts and benefits

The proposed amendments in relation to the board of inquiry provisions across the Resources Safety Acts will provide consistency, alignment with the requirements under the HR Act and will support boards of inquiry undertaking effective inquiries into serious incidents.

Costs	Benefits
Stakeholders would only be subject to increased penalties if they commit an offence and even then, the court would have a discretion as to the level of penalty imposed.	Where an offence is committed the level of penalty available would be commensurate with the significance of the offence and consistent with other Resources Safety Acts.
	It is not anticipated that amending maximum penalties units will increase the number of matters prosecuted before the courts. The amendments are designed to deter this undesirable behaviour.
	The benefits to the community of a well conducted, streamlined inquiry into a serious incident are significant.

Option 2 – Status quo (do nothing)

If the status quo is to be maintained there will be a failure to have consistent penalties for offence provisions that relate to the conduct of a board of inquiry as well as continued incompatibility with human rights provisions of the HR Act.

Recommended option

The recommended option is amending the legislation as described in Option 1. This will attain

consistency across resources safety legislation and remove incompatibility with human rights provisions.

Consistent penalties for assault and obstruct offences under the Resources Safety Acts

Issue

There are inconsistent maximum penalty units (PU) for assault or obstruction of public officers acting under the Resources Safety Acts. These are currently:

- 100 penalty units under the CMSHA
- 100 penalty units under the MQSHA
- 20 penalty units under the Explosives Act

These penalties are also less than those applying in comparable workplace safety Acts (e.g., the WHSA, the PG Act, the *Water Supply (Safety and Reliability) Act 2008* and the *Electrical Safety Act 2002*). Maximum penalties for assault or obstruction under those Acts are at least 500 penalty units (assault can have higher penalties under some Acts). Table 9 details the discrepancy between the Explosives Act, the CMSHA, the MQSHA and the PG Act and similar legislation that has safety at work as an objective, including the WHSA.

Table 9 - Comparison of maximum penalty unit values

Provision under the Resources Safety Acts	Maximum penalty
Explosives Act , section 105 - Obstruction of inspectors	20 penalty units
CMSHA , section 181 - Obstructing inspectors, officers or industry safety and health representatives	100 penalty units
MQSHA , section 178 - Obstructing inspectors, officers or district workers' representatives	100 penalty units
PG Act , section 811 - Obstruction of inspector or authorised officer	500 penalty units
Comparable Acts	
WHSA , section 188 - Offence to hinder or obstruct inspector	500 penalty units
WHSA , section 190 - Offence to assault, threaten or intimidate inspector	1,000 penalty units or 2 years imprisonment
Electrical Safety Act 2002 , section 145B - Offence to assault, threaten or intimidate inspector	500 penalty units or 2 years imprisonment
Water Supply (Safety and Reliability) Act 2008 , section 485 - Obstructing an authorised officer	500 penalty units

Rationale for government action

Whilst the incidence of these offences is infrequent (with no occurrences reported from July 2009 to April 2022), the impact of being assaulted at work can be significant and ongoing, and the ripples of these incidents reach beyond individuals themselves, having impacts on family members and employers and on the broader community. Assault and obstruct provisions aim to provide an adequate penalty for such actions against public officers, such as inspectors and officers authorised under the legislation. However, the current offence penalties under the Resources Safety Acts are inconsistent.

Objective of government action

The objective is to strengthen the effectiveness of the existing assault and obstruct offence provisions in the Resources Safety Acts.

Options

Option 1 – Amend legislation

This option proposes to make amendments to the Explosives Act, CMSHA and MQSHA to bring the maximum penalty for assault and obstruct offences in line with the PG Act and other comparable legislation, which is 500 penalty units.

Impacts and benefits

Costs	Benefits
Stakeholders will only be subject to an increased penalty if they commit an offence and even then, the court will have a discretion as to the level of penalty imposed.	Increased effectiveness in the legislation by having consistent penalties for the same offences across the resources industry.
	A more adequate penalty for assault/obstruct offences in the resources industry.
	Inspectors will be better supported and protected when carrying out compliance activities.
	Increasing the penalties will enhance deterrence and improve safety and health outcomes.

Option 2 – Status quo (do nothing)

This option proposes no action is taken on this issue. This means that public officers will continue to work under an approach that is fragmented and does not afford them an equal level of protection across the Resources Safety Acts in the event of an assault or obstruct incident. Deterrence may not be achieved with such low penalties.

Recommended option

Option 1 is the recommended option. It is recommended that the penalty units prescribed under the assault and obstruct offences of the Explosives Act, CMSHA and MQSHA be increased from 20 and 100 penalty units, respectively, to 500 penalty units.

Consistency will strengthen the provisions making them more effective in supporting inspectors carrying out compliance activities and supporting the objects of the Acts, which relate to protecting the safety and health of persons. Increasing the penalties will also enhance deterrence.

No additional compliance costs are anticipated as the offence already exists in the current legislation. It will only impact stakeholders who commit assault or obstruct offences.

Consistency in penalties for failing to provide help to SSHC representatives and committees

Issue

Section 104 of the MQSHA imposes a duty on the SSE to provide help to the SSHC representative and committee. Help is provided through training support, enabling facilities for use of the committee and allowing for regular payment for the time the representatives and committee members are involved with the committee. The current penalty value for failing to carry out the duty under section 104 is 40 penalty units, which is not consistent with similar WHSA requirements under section 79 and the requirement to establish the committee under the MQSHA under section 98, which are 100 penalty units respectively.

The SSHC provides a vital forum for management and workers to come together to discuss systemic safety and health issues and look at ways to improve the SHMS. The intent of having an SSHC is just as important as the intent of helping the SSHC carryout its functions.

Rationale for government action

The rationale for government action is to ensure consistency and to ensure that SSHC's operations which focus on providing improvements for safety and health issues are supported.

Objective of government action

The objective of the proposal is to be consistent with comparable provisions of the WHS Act requirements under section 79 and the requirement to establish the committee under the MQSHA under section 98, which are 100 penalty units respectively. If the legislation imposes a penalty for not establishing the committee, the same penalty should apply for not facilitating the committee once established.

Options

Option 1 – Amend legislation

Option 1 proposes to increase the current penalty value for failing to provide help to the SSHC representative under section 104 of the MQSHA from 40 to 100 penalty units.

Impacts and benefits

Costs	Benefits
Stakeholders will only be subject to an increased maximum penalty if they commit an offence and then the court will determine the level of penalty that is imposed.	Increased effectiveness in the legislation by having equally consistent penalties for the same offences across comparable legislation.
	Improved support for the operation of the SSHC which will provide improved safety and health outcomes.

Option 2 – Status quo (do nothing)

If no action is taken on this issue the inconsistency in penalties between failing to establish an SSHC and failing to provide help to the SSHC will remain. This creates an anomaly that does not support the objectives of the MQSHA which includes protecting safety and health of persons.

Recommended option

Option 1 is the recommended option as it creates consistency between comparable legislation, and it removes the current anomaly between the need to establish an SSHC and the need to provide help to the SSHC for carrying out its functions.

Operational amendments

Operational amendments help ensure legislation is kept contemporary and effective, which in turn enables RSHQ to regulate safety and health in the Queensland resources sector more efficiently and effectively. The proposals in this section generally outline improvements which aim to deliver savings for industry stakeholders either directly, or indirectly by providing for system and process improvements.

Explosives security clearance

Issue

New security clearance requirements for explosives came into effect in February 2020. The amendments implemented Government policy to ensure persons with access to security sensitive explosives undergo security assessment; and that persons with domestic violence orders are not suitable to hold a security clearance or explosives authority or to have unsupervised access to explosives.

The Explosives Act currently does not provide for any exemptions regarding security clearances. As a result, employees of licenced weapons dealers, who are already covered under the comparable weapons licencing regime, are required to hold a security clearance under the Explosives Act in addition to their weapons licence. Both regimes involve criminal history checks and feature continuous monitoring in relation to criminal history and domestic violence, so the imposition of the additional administrative and cost burden on these employees is not warranted given there are no noteworthy community safety and security benefits by applying both regimes.

In addition, an inconsistency has been identified about requirements for the destruction of a person's biometric information (digital photo and digitised signature) held by the regulator when it is no longer required. Currently, this information must be destroyed when an occupational authority or security clearance expires; however, the Explosives Act does not provide a similar requirement for when an occupational authority or security clearance is cancelled or surrendered.

Rationale for government action

Employees of licenced weapons dealers are required to hold a current licence under the *Weapons Act 1990* (the Weapons Act) as a condition of their employment if they have access to weapons as part of their job. If an employee of a weapons dealer loses their weapons licence,

they will no longer have lawful access to weapons. These same employees are also currently required to hold a security clearance under the Explosives Act if they may have unsupervised access to explosives (e.g., ammunition, propellant powder, etc.) as part of their job.

Applicants for a security clearance and for a weapons licence both undergo similar checks in relation to criminal history and domestic violence and are subject to continuous monitoring in relation to any changes in status by the Queensland Police Service. The current duplicative requirement for licenced employees (i.e., who hold a weapons licence) of weapons dealers to also hold an explosives security clearance imposes an unnecessary additional administrative and cost burden, with no additional safety and security benefits realised.

In relation to biometric information, the Explosives Act requires this personal information to be destroyed when an occupational authority (i.e., prescribed explosives licences) or security clearance expires unless the information is still information is relevant to an investigation, inquiry or proceeding. The intention is that personal information no longer required to be retained by the regulator should be destroyed. However, the Explosives Act is currently silent on the treatment of biometric information in relation to the surrender or cancellation of an occupational authority or security clearance. It should be treated in the same way as following the expiry of an occupational authority or security clearance (i.e., it should be destroyed if no longer needed).

Objective of government action

The key objective for government intervention is to remove the current duplicative security screening requirement under the Explosives Act for appropriately licenced employees of weapons dealers. A secondary objective is to ensure the equitable treatment of biometric information held by the regulator following the surrender or cancellation of an occupational authority or security clearance.

Options

Option 1 – Amend legislation

It is proposed to amend the Explosives Act in two ways. Firstly, to insert an exemption to the security clearance requirement under section 33(1)(b) of the Explosives Act in relation to employees of licenced weapons dealers where the employee already holds a weapons licence that is in force. The proposed exemption would only apply to employees of licenced weapons dealers because holding a valid weapons licence is already a requirement for their job – it would not apply for weapons licence holders generally.

Secondly, to the broaden the requirement under section 123AF(2)(a) of the Explosives Act for destruction of biometric information to also apply when an occupational authority or security clearance is cancelled or surrendered.

Impacts and benefits

It is estimated that there are approx. 200-400 eligible weapons dealer employees state-wide on an ongoing basis that could potentially benefit from the proposed exemption from requiring a security clearance under the Explosives Act. The biometric information proposal is a minor administrative amendment that has no direct impact on occupational authority or security clearance holders. Therefore, an estimate of potential numbers of occupational authorities or security clearances cancelled in any given period or surrendered has not been provided.

Costs	Benefits
No costs to business under this option.	Removes red tape and unnecessary regulatory burden.
Government revenue relating to security clearances would be forgone; however, this is expected to have little practical effect as the security clearance application and renewal fees are based on a cost recovery calculation (i.e., are cost neutral).	An employee of a licenced weapons dealer would be eligible for an exemption if the employee holds a weapons licence that is in force. This is a direct short-term saving of \$203.40 (cost of application fee for a security clearance in 2021-22) per employee, as well as longer-term costs associated with the five-yearly renewal of a security clearance (cost of renewal fee for a security clearance in 2021-22 is \$162.70). In simple terms, the short-term (over five years) estimated collective direct saving to these employees could be up to approx. \$81,000 plus any administrative savings (i.e., time taken to complete and submit forms, etc).
	Additional time-savings for eligible employees of weapons dealers associated with completing a security clearance application / renewal form and submitting it via a participating Australia Post outlet would also be saved by eligible employees (including periodically for subsequent renewals).
	The biometric information amendment will ensure appropriate destruction of personal information held by the chief inspector will occur when it is no longer required.

Option 2 – Status quo (do nothing)

This option maintains the status quo and so will not provide a legislative solution to the two matters identified in relation to the security clearance regime established under the Explosives Act. Option 2 would result in ongoing costs to eligible employees of licenced weapons dealers (refer above for details) and would see continuing inconsistency regarding destruction of biometric information following the cancellation or surrender of an occupational authority or security clearance (i.e., versus expiry of the same).

Recommended option

The recommended option is Option 1, under which it is proposed to amend the Explosives Act to provide legislative solutions to the matters identified in relation to the security clearance regime. The proposed amendments will remove duplicative security screening requirements for eligible employees of licenced weapons dealers. Specifically, an employee of a licenced weapons dealer would be exempt from needing to hold a security clearance under the Explosives Act where the employee already holds a weapons licence that is in force. The changes also improve the administration of the security clearance regime by ensuring biometric information can be destroyed when no longer needed after an occupational authority or security clearance is cancelled or surrendered.

Improved training for mine workers

Issue

The Mining Safety laws clearly establishes safety and health obligations and protections for mine workers however, without adequate training workers may not be aware of their legislative obligations or the protection that the legislation affords those reporting safety issues. Training requirements are already established in the CMSHA and the MQSHA. The associated regulations provide further detail regarding training and competency requirements. However, the CMSHR does not specifically refer to the legislation in the training provisions.

As mentioned throughout this document, Dr Brady found that “A total of 17 of the 47 fatalities involved a lack of task specific training and/or competencies for the tasks being undertaken. A further 9 had inadequate training.”

To ensure safety of all workers it is fundamental that all workers are cognisant of their legislative obligations regarding safety and health. This includes being aware of the provisions that protect workers from reprisal.

Rationale for government action

Appropriate training of workers is critical in ensuring safety within the resources sector. In the Bol Report (Part I), it was recommended that ‘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 CMSHA’ (Recommendation 12).

Part II of the Bol Report, found that it is critical that all safety concerns are raised in a timely way without fear of reprisal. As a result of these findings the report recommended that coal mines review their site induction procedures to ensure that all new workers at the mine, are aware of and understand the operation of the general safety provisions (refer sections 274, 275, 275AA and 275AB) of the CMSHA (Recommendation 19).

Training requirements are established in the CMSHA and the MQSHA. The associated regulations provide further detail regarding training and competency requirements. The CMSHA and the CMSHR do not make specific reference to the training covering the legislation (i.e., knowledge about the CMSHA and CMSHR, including obligations, protections, etc.). This is in contrast to the MQSHR which specifies in section 91(f) that induction training and assessment must include appropriate training on the MQSHA and the MQSHR.

To ensure safety of all workers it is fundamental that all workers are cognisant of their legislative obligations regarding safety and health. This includes being aware of the provisions that protect workers from reprisal.

Prescribing essential aspects of training schemes will ensure consistency between mining safety legislation and will contribute to improved safety and health outcomes for mine workers as intended by the Bol.

Source	Evidence
Bol Report, Part I	<i>Finding 67</i> - It would be beneficial to safety for the training scheme required by section 82(3) of the Regulation to cover the provisions of the Act and Regulation, including the safety and health obligations imposed by Part 3 of the Act.

Objective of government action

The objective of government action is to provide clarity and consistency with regard to legislative training for coal mine workers, similar to those provided for mines other than coal mine workers.

Options

Option 1 – Amend legislation

Amend the CMSHR to include a requirement for a mine’s training scheme to include training on the Act and Regulation. To ensure that legislative obligations and protections are covered in training schemes it is proposed that a provision is included in the CMSHR similar to subsection 91(f) of the MQSHR.

The proposed amendment to the CMSHR is merely a clarifying amendment, making clear that required training must include training on the CMSHA and CMSHR. Mandating training of the statutory obligations is just one part of ensuring training is adequate, the levels of reporting safety issues are at optimal levels, and ultimately improving safety outcomes. However, if this aspect of a workers’ obligations is not made explicit in the legislative requirements for training the topic may be overlooked. The proposed amendment accords with the recommendations of the BoI regarding adding a legislative imperative to the training schemes for mine workers. It is far more beneficial to ensure that workers are trained appropriately from the outset rather than identifying this as an issue after a HPI or accident has occurred.

Impacts and benefits

Costs	Benefits
Training requirements already exist under the Mining Safety Acts and training schemes are outlined in the respective regulations. Clarifying the CMSHR provisions is not envisaged to lead to significant new costs.	This is proactive approach which enables intervention at an early stage should training not met prescribed standards.
	No additional compliance costs are anticipated as training requirements already exist in the current legislation.

Option 2 – Status quo (do nothing)

This option maintains the status quo and so will not provide a solution to the disparity between the Mining Safety Acts. The coal mining sector would not be compelled to include legislative requirements particularly in regard to safety and health obligations prescribed in the Mining Safety Acts, in training packages. There would also be limited compliance and enforcement options available to ensure training is optimal.

Recommended option

The recommended option is Option 1, under which it is proposed to amend the CMSHR to include a requirement for a mine's training scheme to include training on the Act and Regulation.

Identified benefits far outweigh the minimal costs of ensuring a topic is mandatory in training. Mandating training of the statutory obligations is just one part of ensuring training is adequate, the levels of reporting safety issues are at optimal levels, and ultimately the improvement of safety outcomes.

Gas device approval authorities

Issue

GDAA legislation was established to provide a transparent and accountable framework for appointing persons to approve gas devices before they are supplied (relates to a gas device (type A) only), installed or used in Queensland.

The PG Act and equivalent legislation in other Australian jurisdictions distinguish gas devices (type A) and (type B). Generally, gas devices (type A) are mass-produced domestic and light commercial appliances. They are usually found in homes and commercial sites. Some examples include gas stove tops, BBQs, pizza ovens, ducted heating appliances, commercial catering equipment and hot water systems. A gas device (type B) is any gas device that is not a gas device (type A) – e.g., industrial or commercial appliances, refrigeration devices, a fuel gas system for the propulsion of a vehicle or vessel, etc.

Gas device approval is a standard requirement of Australian and international gas safety regulators. In Queensland, the PG Act requires gas devices to be approved by the chief inspector or the holder of a GDAA before they are supplied, installed or used. Gas device approval helps achieve the safety outcome of ensuring risks associated with flammable, explosive and toxic gas during the operation of devices are controlled and no harm is caused to workers or consumers.

The *Land, Explosives and Other Legislation Amendment Act 2019* sought to establish a transparent process to appoint persons to approve gas devices by the introduction of a new Chapter 9, Part 6A—Approval of gas devices. During the drafting process of supporting subordinate legislation several anomalies were identified in the PG Act provisions potentially affecting the operation and workability of the scheme.

Rationale for government action

Adjustments to the GDA legislation will improve its effectiveness, transparency, and capacity to respond to emerging gas devices such as hydrogen fuel cells. This includes removing ambiguity around the wording of the section that provides for the approval of gas devices and the written notice that is required for a gas device when being supplied, installation or used; the cancellation and suspension of gas device approvals; and the capacity to establish categories of GDAs.

Approval of devices for supply, installation and use

Section 731AA(1) of the PG Act provides that a person must not supply a gas device (type A) or install or use any type of gas device unless the supply, installation or use has been approved by the chief inspector or a person who holds a GDA for the gas device. That is, a holder of a GDA (or the chief inspector) approves the design of the device as being appropriate for supply, installation or use. A gas device must be approved by a GDA holder or the chief inspector prior to supply, installation or use.

In addition to the GDA approval process, the chief inspector needs to retain the discretion to be able to approve the installation and/or use of a gas device in unique or innovative situations. An example of this is fuel cell trials, which have been approved by the chief inspector for specific time frames and under conditions that ensure safety and allow Queensland's commitment to hydrogen energy to progress without unnecessarily regulatory obstacles.

The current wording of this section has led to confusion throughout the industry and for the regulator regarding requirements.

Written notice to be supplied with gas device

Section 731AA(2) of the PG Act provides that a person must not supply a gas device to a person unless a written notice in the approved form is provided which states that the device must be approved for installation and use by either the chief inspector or a GDA holder. This could be interpreted as only being required for type A devices. However, this notification requirement was only intended for gas devices (Type B) as they are generally individually designed and not a standard device that can be approved en masse.

The cancellation and suspension of certifications by conformity assessment bodies

The PG Act recognises and relies on the commercial practice by conformity assessment bodies to certify mass-produced gas appliances as meeting specific gas device standards as an approval

under the PG Act for these appliances. Under commercial practice processes, certifications can be cancelled and suspended for reasons other than safety, for example:

- product not available for design verification auditing
- manufacturer requests cancellation due to ceasing product production
- approval is transferred to a new approval under a different GDAA.

If cancelled or suspended for a reason other than safety, the regulator needs to ensure that the safety approval for mass produced devices such as BBQs remain in place, otherwise consumers could inadvertently be using an unapproved device. Currently when this occurs, appliance approval is maintained by reliance on section 731AA of the PG Act that allows the chief inspector to approve gas devices. For this system to work effectively the chief inspector must first be aware of the cancellation of the device’s approval and secondly must ensure that interested parties are informed. This can be achieved by publishing of a notice advising the chief inspector’s approval for these devices on appropriate web sites.

While current provisions are workable, they are not clear and rely on administrative arrangements to ensure that the scheme covers all gas devices adequately.

Capacity to establish categories of holders of GDAA

Whilst the PG Act provides for types of gas devices there is no similar provision for categories of GDAA to be established.

The PG Reg refers to a code of practice for GDAA holders. This code sets out the conduct and technical obligations for holders of a GDAA in Queensland and references four different types of GDAA, see Table 10.

Table 10 - Four different categories of GDAA

GDAA category	Scope of gas device approval work
type A	Gas device (type A)
type A2	Eligible gas device (type A)
type B	Gas device (type B) that are not fuel gas refrigeration devices
type B2	Fuel gas refrigeration devices

The capacity to assign categories of GDAA needs to be included in the PG Act to ensure that the gas device scheme has simpler and clearer legislative provisions and flexibility to create additional categories as new gas devices are developed.

Objective of government action

The primary objective of government action is to ensure that the authorising provisions for gas device approval authorities are clear and reflective of relevant industry processes, protocols and procedures, without adding to the regulatory burden.

Options

Option 1 – Amend legislation

It is proposed to amend the GDAA provisions in the PG Act so that there is no ambiguity. This would provide a clear framework for the gas device approval scheme which is consistent with the national framework. The provision for different types of GDAA would also future-proof the legislation allowing for the easy inclusion of different types of GDAA as they are required (for instance, for approval of hydrogen fuel cells).

Proposed amendments would include:

1. That gas devices (regardless of type) receive design approval from either the chief inspector or a GDAA holder prior to the supply, install or usage. The chief inspector will retain the ability to approve the installation and use of a gas device.
2. That a written notice in the approved form be supplied with a gas device type B prior to the supply, installation and usage.
3. That a gas device approval by a conformity assessment body remains in place unless there is a safety reason for the approval to be suspended or cancelled.
4. To ensure that the PG Act allows the regulation to provide for different types of GDAA.

Impacts and benefits

Costs	Benefits
There will be no additional costs on industry or the regulator.	The proposed changes to the GDAA framework will ensure there is clarity for the operation of these provisions and that the current industry practice is reflected.
	Non-compliance with the GDAA framework would be able to be appropriately addressed.

Option 2 – Status quo (do nothing)

Without legislative amendments the scheme would continue to be managed administratively however if punitive action is to be taken against a person for a breach of this framework it may be difficult to enforce.

Recommended option

It is recommended that the amendments for the GDAA framework outlined in Option 1 be implemented. This will ensure that there are clear provisions and that they are reflective of relevant industry processes, protocols and procedures, without adding to the regulatory burden. At the same time, they will promote consistency with the national framework. The amendments will strengthen the GDAA legislative framework as well as providing clarity for all stakeholders.

Domestic biogas systems

Issue

Homeowners and businesses are looking to emerging technologies to allow them to be more energy efficient and for methods to decarbonise their activities. Home biogas systems are reportedly simple to utilise. Household waste is placed into the digester where it undergoes a bio digestion process to break down the organic waste. The bacteria in the digester system then turns the organic waste into biogas which can be safely stored within the digester or can be used for a number of purposes including heating and the production of electricity. The digestate can then be used in fertiliser or transformed into building materials. Millions of these biogas systems are currently being utilised throughout the world and small-scale domestic biogas systems are now available for use, with householders in Australia being able to purchase them over the internet. Due to the relative ease of acquiring a domestic digester, it is difficult to know how many have been purchased and are in operation in Queensland.

Under current Queensland legislation, domestic biogas systems are regulated as operating plant and any gas devices attached to the biogas installation are classed as gas devices (Type B).

Operators of operating plant must have a safety management system and as part of this, undertake a formal assessment of risk in relation to the operating plant. These requirements are excessive and disproportionate to the risk posed by a small domestic biogas systems.

Gas devices (Type B) have rigorous requirements and have to be approved by the chief inspector or a GDAA holder (GDAA category type B) and be installed by the holder of a gas work

authorisation holder (industrial appliances) which has gas work relating to biogas systems within the scope of the authorisation. The installation process of a gas device (type B) requires a risk assessment and so maintains a level of risk mitigation. Gas devices that form part of a biogas gas system include boilers and generators for the production of electricity, which are gas devices (Type B). Currently, all gas work authorisation applicants must apply to RSHQ for the granting of an authorisation and the applicant must provide evidence of having attained the required competencies (e.g., *CPCPGS4023B Install, commission and service Type B gas appliances*) and their documented practical experience. For biogas the practical experience should include knowledge of manufacturers installation instructions, material compatibility with the components of a Biogas system, risk management when producing and/or using Biogas. These requirements are provided for through the application process. Under section 123(b) of the PG Reg, gas work requirements mean the document called 'Queensland gas work authorisation requirements' which is currently published on the RSHQ website. This document provides the required competencies for each authorisation category.

There has also been confusion regarding the definition of "industrial appliance". Currently, a number of non-industrial appliances fall under the gas work authorisation category (industrial appliances).

Rationale for government action

Under current Queensland regulation, domestic biogas systems are regulated the same way as an operating plant and any gas devices attached to the biogas installation are classed as Type B devices.

Currently, a small gas device used in a domestic biogas environment is required to undergo a type B gas device approval process and be operated and maintained under an operating plant framework including a safety management system and defined safety positions. This is costly and onerous for consumers trying to reduce their household waste and is a disincentive to potential users.

Objective of government action

The objective of government action is to ensure that the domestic biogas system requirements facilitate growth in the domestic biogas sector; are proportionate to the risk involved, and that safety and health remains protected.

Options

Option 1 – Amend legislation

It is proposed that domestic biogas systems become exempt from being operating plant. Cost savings for the consumer will be possible through the removal of the cost of preparing and maintaining a safety management system.

It is proposed that a definition of domestic biogas system is inserted under Schedule 2 of the PG Act, prescribing that a domestic biogas system is a system that consists of a digester, connected pipe and a device used, or designed to produce, store, transport, and use fuel gas up to a consumption rate of no more than 50kW which equates to 180 MJ/hr. There will be no payable safety and health fee.

Gas work in relation to a domestic biogas system would still be undertaken by a person who held an authorisation under Schedule 5, Part 3 of the PG Reg; gas work authorisation (industrial appliances).

A clarifying amendment will be required to Schedule 5, Part 3 of the PG Reg in relation to the authorisation category. There has been confusion regarding the definition of “industrial appliance”. Currently, a number of non-industrial appliances fall under the gas work authorisation category (industrial appliances). Therefore, to ensure that the authorisation category is clear that it accommodates type B domestic appliances as well as industrial appliances it is proposed the Schedule 5 Part 3 will be amended to be gas work authorisation (type B devices and industrial appliances). Currently, the definition of industrial appliance under Schedule 7 of the PG Reg provides ‘industrial appliance means a gas device (type B) designed for using fuel gas as a fuel or feedstock in an industrial process’. The proposal is to amend the definition to provide clarity and therefore it should read:

“industrial appliance means a gas device (type B) designed for using fuel gas; as a fuel; or feedstock in an industrial process.”

To work on a domestic biogas system, a gas work authorisation (industrial appliances) must be held. Biogas must be within the scope of the authorisation. It is proposed that further requirements in relation to applications for a gas work authorisation in relation to domestic biogas systems would be detailed in the Queensland Gas Work Authorisation Requirements document provided on the RSHQ website.

The installation requirements would include:

- Suitability of materials for digester construction, pipe, fittings and appliance.
- Location and ventilation requirements digester (hazardous area) and appliance (unknown combustion characteristics and toxins).
- Commissioning and combustion testing.
- Maintenance and repair.

To assist owners and gas work authorisation holders of domestic biogas systems further, an information sheet will be published on the RSHQ website to provide guidance on the regulatory and safety requirements for these systems. The information sheet will inform owners of domestic biogas systems about their obligations. This will be supported by the installation and maintenance of the domestic biogas systems by a licensed professional (holder of an appropriate gas work authorisation) to mitigate any hazards and safety risks.

Impacts and benefits

Costs	Benefits
There are no significant costs impacts on the regulator	Cost savings for consumers.
	A positive incentive for Queenslanders to consider the purchase of a domestic biogas digester which would provide a renewable and clean source of energy that benefits the environment.
	These amendments will also align Queensland with the Federal government initiative of boosting bioenergy opportunities in Australia. ⁴²
	Will provide environmental benefits and reduce regulatory burden while protecting safety at the same time.

Option 2 – Non-regulatory option

Under this option, no regulatory change would be made. Educational materials could still be provided about how to safely use domestic biogas systems. However, the burden of the regulatory requirements would be significant for consumers of the domestic biogas systems and it would not be proportionate to the risk posed. The non-regulatory option will fail to

⁴² Australian Renewable Energy Agency, Biogas Opportunities for Australia, <https://arena.gov.au/knowledge-bank/biogas-opportunities-for-australia/>.

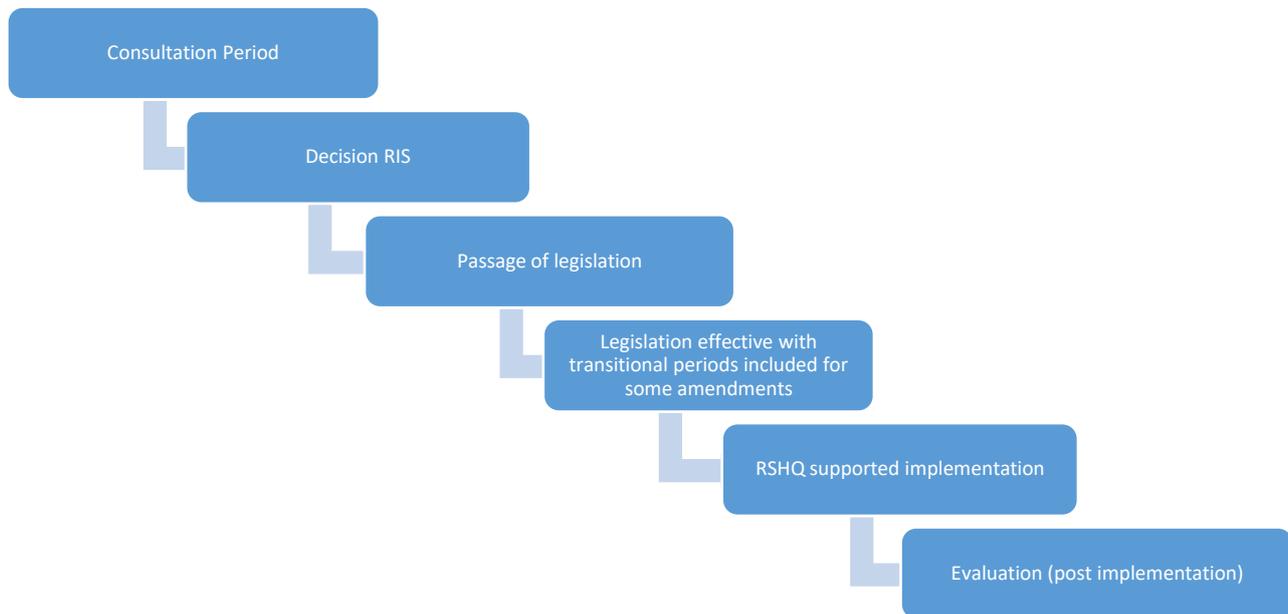
ensure that the legislation maintains pace with the take up of technological advancements in this space. Additionally, under this option the current burdensome requirements under the legislation may deter consumers from purchasing domestic biogas systems and therefore would fail to achieve the potential positive environmental impacts. Lastly, the only way to achieve clarity in relation to the definition of “industrial appliance” in the legislation is to pursue Option 1.

Recommended option

These amendments will minimise barriers for domestic biogas system owners or users to engage in the domestic biogas market whilst ensuring safety standards are met and associated risks are managed. This is achieved through streamlining the requirements that apply to domestic biogas system through the removal of onerous requirements that are not proportionate to risk. Safety concerns and risks will be managed through the ongoing requirement to use qualified gas work authorisation holders for installation and maintenance of these systems. Information sheets will also be made available on the RSHQ website advising system operators/users of their requirements.

These amendments will also make the option of having a domestic biogas system a far more attractive and cost-efficient option than it currently is to consumers. From a cost perspective, there are no negative impacts to the community by introducing these amendments.

Implementation, compliance support and evaluation strategy



Following the consultation period RSHQ will analyse the submissions and prepare a Decision RIS based upon the analysis. RSHQ is working towards introducing the legislative amendments into Parliament in late 2023/early 2024. The timeframe for passage of the legislation will depend on how long the relevant Parliamentary Committee will need to examine the proposed legislation. The Parliamentary Committee may also conduct public and private hearings and invite interested parties to provide written submissions.

Not all of the approved amendments will take effect from the date Parliament passes the legislation. RSHQ has sought stakeholders' feedback on appropriate transitional periods and for when parts of the reform package requirements should commence. This will ensure that there is sufficient lead up time to the implementation of key reforms such as the additional certificates of competency for key safety roles.

The regulator will support industry throughout the implementation of the proposed reforms. Regular stakeholder communication will be a critical part of the implementation process. RSHQ will continue its usual compliance and enforcement program and will ensure that this program maintains pace with the amendments and their commencement where required.

RSHQ will evaluate the effectiveness of the changes by continuing to monitor the safety performance of industry through inspections and audits, reviewing HPIs and other safety information and discussions with stakeholders. A key part of this evaluation will be the data collection and analysis through the Central Assessment Performance Unit. RSHQ will use the current safety performance data as a baseline and will compare this with the ongoing safety

performance of industry. RSHQ will develop measures to evaluate this safety performance. This data and analysis will also be used to ensure that RSHQ compliance activities are targeted to the highest emerging risk areas for industry.

Competition principles

The proposals under Option 1 do not restrict competition and are consistent with the Competition Principles Agreement. The cost benefit analysis details the benefits to stakeholders and highlights the achievement of better safety outcomes for minimal cost to industry. These proposals will achieve social objectives of improving workers and affected communities, safety and health in the resources sector. Proposals have been considered with the intent to minimise the impact on industry whilst achieving the greatest safety and health outcomes.

Consistency with fundamental legislative principles

The fundamental legislative principles under section 4 of the *Legislative Standards Act 1992* (LSA) were considered during development of the proposed regulatory reform options. The proposed reforms will not be inconsistent with the fundamental legislative principles in the LSA. The reforms provide sufficient regard to the rights and liberties of individuals and to the institution of parliament.

Appendix 1 – Questions at a glance

Key concepts	Questions
Introducing critical control management	<p>QUESTION 1: What impact will the proposed critical control requirements have on clarity, confidence and consistency regarding application of controls in risk management?</p>
Competency for key critical safety roles	<p>QUESTION 2: Do you agree with the Option 1 proposals for the additional certificates of competency? Please explain why, or why not? Are there any other options to address the problem?</p> <p>QUESTION 3: Do you think Option 1 will have the expected costs and benefits outlined in the cost benefit analysis?</p> <p>QUESTION 4: Are there other parameters or estimates that should be used instead when estimating costs and benefits?</p> <p>QUESTION 5: Are there cost and benefits currently not considered in relation to Option 1 that should be?</p> <p>QUESTION 6: What transitional period do you think will be reasonable for those currently in the safety critical positions to prepare for examination for certificates of competency, and gain a certificate of competency? Would a three-year transitional period be sufficient to obtain a certificate of competency?</p> <p>QUESTION 7: The BoI recommended that an underground coal mine SSE should also hold a first class underground mine manager certificate of competency. Should a surface coal mine SSE be required to be the holder of a surface mine manager certificate of competency so that a consistent approach is adopted?</p> <p>QUESTION 8: Should a surface electrical engineering manager also be required to hold an electrical engineering manager certificate of competency?</p>
Continuing professional development (CPD)	<p>QUESTION 9: Do you agree that the integrity of the CPD Scheme would be best supported through the proposed legislative changes?</p> <p>QUESTION 10: Do you envisage any unanticipated costs to you or your organisation with the introduction of a compliance and enforcement framework for the CPD scheme?</p>

Establish site safety and health committee	<p>QUESTION 11: Does the proposed SSHC structure provide an adequate structure that coal industry would support?</p> <p>QUESTION 12: What is an appropriate transitional period to allow for industry preparedness in adopting the new amendments to the SSHC provisions and why have you nominated this period?</p> <ol style="list-style-type: none"> a. None required b. 6 months c. 12 months
Information sharing to improve safety	<p>QUESTION 13: Do you support greater sharing of safety information and transparency in the resources sector?</p>
Enforceable undertakings	<p>QUESTION 14: What matters do you think should be covered by an enforceable undertaking?</p>
Industrial manslaughter	<p>QUESTION 15: Is it a reasonable view that whoever employs/engages or arranges for a worker, and whose negligent conduct causes the death of the resources sector worker, should be considered (either jointly or individually) liable for industrial manslaughter?</p>
Remote operating centres	<p>QUESTION 16: Should the MQSHA also be amended to clarify coverage of the MQSHA for off-site supervisors. If so, what if any differences to the ROC proposal should be made for the MQSHA?</p> <p>QUESTION 17: Should there be a requirement in the CMSHA that persons in safety critical roles must be located at a mine site e.g., an SSE, UMM and ventilation officer?</p>
A contemporary board of examiners	<p>QUESTION 18: Is demonstrated expertise or experience in the assessment of competencies seen as an essential skill set for at least one member of the BoE? Why or why not?</p> <p>QUESTION 19: Is it important to have a chairperson of the BoE who is independent of both the Queensland government and the mining industry? Why or why not?</p>
Notification of diseases (refer Attachment 4)	<p>QUESTION 20: Do you see any issues with the proposed streamlining of prescribed disease notification requirements? If so, what are they?</p>

	<p>QUESTION 21: Are there any other circumstances where notification of a prescribed disease occurrence by an SSE may not be needed? If yes, please provide details.</p> <p>QUESTION 22: Do you think there are any alternative mechanisms (i.e., not reliant on SSEs notifying of prescribed disease occurrences) that would still ensure the regulator and other stakeholders (including industry safety and health representatives and district workers' representatives) are kept appropriately informed of disease occurrences in the mining industry? If yes, please provide details.</p> <p>QUESTION 23: Do you agree with updating the lists of prescribed reportable diseases in the CMSHR and MQSHR and also to make them consistent across the two regulations? Why or why not?</p>
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Appendix 2 – Cost benefit analysis

Summary

A number of amendments are proposed as a preventive and proactive package of safety reforms. All proposals, other than proposals for additional certificates of competency have minor if any cost impacts. Therefore, the cost benefit analysis focuses on the proposed additional certificates of competency.

While the potential benefits of additional certificates of competency are not modelled explicitly due to a lack of data, an illustrative example of quantified benefits are presented to frame the case for action for this proposal, compared to the status quo.

Key findings include:

- The cost associated with the new certificates of competency for existing statutory positions for surface mine managers, surface mechanical engineering managers, underground site senior executives, underground electrical engineering managers and underground mechanical engineering managers rather than new positions per se, (which will be performed by existing staff with new certifications) is \$3.9 million as a present value⁴³ (\$597,968 as an equivalent annual value) across all mining industry in Queensland. Underground coal represents 45 per cent of costs, and surface coal 55 per cent.
- The benefits of the amendments are to improve safety and health in Queensland mines. Due to uncertainty with key variables these have not been incorporated into a net present value calculation. However, an illustrative quantification was carried out to illuminate the potential benefits relative to costs. The figures here are based on the best estimates of expert staff in RSHQ. Given a one-year period with no benefits, and a subsequent three-year transition period where only half the benefits are assumed to eventuate, some indicative values are:
 - There would be a fall in injuries due to amendments such as existing positions requiring statutory certificates. If this reduction in injuries was one per cent for the three-year transition period, and two per cent each year after, the benefits would be \$786,708 a year for the main period after transition.
 - If there was a reduction in fatalities of five per cent, the annual value (not discounted) for the main period after transition would be \$612,000 per year.

⁴³ **Present value** is the total value of the future benefit stream (10 years) in present day terms - this allows costs and benefits to be compared at the point where decisions are made.

- There would be a reduction in the risk of an underground coal mining disaster due to the proposals. This reduction in disaster risk would not only help avoid fatalities that carry high social costs, but also reduce the risk of mine closure and sterilisation (permanent loss) of coal resources as a result of an explosion. There is not sufficient information available on the baseline risk of an underground coal disaster and other key factors in Queensland to model these risks adequately. However, an exploratory quantification was carried out to illustrate the potential benefits. If there is a baseline disaster risk of five per cent per year, and this risk falls by 20 per cent as a result of the proposed changes, the benefits in reduced lost production and coal sterilisation would be \$11.2 million a year for the main period after transition.
- Overall, this benefit scenario results in present value of \$65.7 million or an annual equivalent value of \$10.1 million a year. These far outweigh the costs.

Introduction and assumptions

This cost benefit analysis is a desktop study based on published data and information from industry sources.

The jurisdiction covered by the analysis is Queensland – i.e., the costs to Queensland are primarily considered. The perspective is for all of Queensland society. The costs are not disaggregated into societal sectors, as the mining industry will bear most of the costs so disaggregation would not add a significant amount of information.

The time frame of the analysis is 10 years, in line with the default time frame suggested by Queensland Regulatory Assessment Statement Guidelines (version 2.1).

In this analysis, the average cost of labour is taken to indicate the value of time. For coal mining this is \$78/hour. These figures are based on Australian Bureau of Statistics (ABS) sources (2020 and include estimates for on-costs. However, as the safety roles relate to senior roles within mines, it is likely this average under-estimates the cost of time. A 20 per cent premium was added onto the ABS average to account for this.

Inspector's time was estimated at \$87/hour (based on advice from the chief inspector). Secretariat support is indicated by an additional AO4 position.

Where historical information is used, the average for the last three years of available data is used to account for annual variability in figures.

A discount rate of seven per cent is applied to the figures to calculate the present value of costs.

The option is compared to a base case of the status quo. This is the world without the proposed policy interventions. This means that costs are presented as relative to the status quo. The option described requires new actions compared to the status quo, and as such is quantified in its entirety.

The overall net present value is not calculated. This is because the main benefit – a reduction in injuries and disaster risk at underground coal mines – has not been explicitly quantified and included due to lack of data. However, a brief illustrative quantitative example is presented to help clarify the benefits of the options.

Costs and benefits

Overview

Option 1 is to progress a comprehensive preventive and proactive package of safety reforms. This package of reforms includes additional certificate of competency requirements. Option 1 is also based on components of HRO theory, with those aspects being a deference to expertise, and a culture of safety. It is crucial that safety critical roles are held by competent persons.

Option 1 will also increase consistency with NSW in relation to certificate of competency requirements in the coal industry.

Only proposed certificate of competency amendments are analysed in the cost benefit analysis, as they are additional to the base case of maintaining current certificate of competency requirements in the CMSHA and MQSHA.

Additional certificates of competency are expected to cause an increase in costs, as well as benefits.

The alternative option is the status quo or no change to existing requirements.

The following certificates of competency for the following safety critical roles are proposed:

- For underground coal mines
 - An electrical engineering manager must be the holder of an electrical engineering manager certificate of competency (underground coal mines).
 - A mechanical engineering manager must be the holder of a mechanical engineering manager certificate of competency (underground coal mines).
 - An SSE must have a first class underground mine manager certificate of competency.

- For surface coal mines
 - A surface mine manager must be the holder of a surface mine manager certificate of competency.
 - A mechanical engineering manager must be the holder of a mechanical engineering manager certificate of competency (surface coal mines).

Safety benefits

The main benefit of the proposed additional certificates of competency is to increase safety and health in the mining industry and reduce accidents.

Those entrusted to fulfil statutory roles are at the frontline of safety and health at a mine and are accountable for providing oversight of the management of mining hazards, risks and required controls. They are there because they are required to have higher competency levels than other workers whom they safeguard.

It is a significant concern that some mines have been appointing workers who are not competent to fulfil safety critical roles. The proposed BoE certification measures are expected to decrease the risk of less competent officers holding important critical safety positions within mines. A related benefit is to increase the status and calibre of those safety critical positions within mines. This benefit was identified by Professor James Reason through his internationally renowned occupational health and safety research.

NSW has the additional coal industry certificates of competency being proposed. The coal industry fatality rate in NSW from 2009-10 to 2019-20 has been lower than in Queensland⁴⁴, although it is not possible to directly attribute this to additional certificates of competency.

There are potentially significant social and economic benefits from the proposals. In particular:

- The reduction in risk of fatalities would have benefits for mine owners, mine workers and mining communities. In particular:
 - There would be less potential fatalities. There have sadly been 52 deaths in Queensland mines between 2000 and the present (March 2022).
 - The national Office of Best Practice Regulation (2021) has suggested that the value of an avoided death is \$5.1 million). In addition to this monetary value, as a consequence of a fatality there are unquantifiable negative social and psychological impacts on the families, friends and communities impacted by a mining disaster.

⁴⁴ Queensland had 14 fatalities in the coal industry, and 10 in metalliferous mines and quarries between 2009-10 and 2019-20. NSW had seven fatalities in the coal industry and 10 in metalliferous mines and quarries between 2009-10 and 2019-20.

- Safer work practices are likely to result in a fall in injuries. Safe Work Australia (2012) weighted the standard Office of Best Practice Regulation's value of an injury-free year by the most common injuries in mining. This revealed a value of \$108,800 per injury free year (updated to 2020 \$). The baseline number of injuries was based on the average annual number of lost time injuries from 2017 to 2020.
- Reduced risk of loss of income from lost production and/or sterilisation of mineral resources as a result of a mining disaster, including:
 - A mine would stand to lose significant income from the temporary closure of a mine as an investigation occurred – this can be a lengthy process.
 - In addition to the temporary closure, in the most serious scenarios, it is likely there would be some sterilisation (permanent loss) of coal resources due to conditions being too dangerous around the impacted seam, or due to sensitivity over disturbing a grave site. Thirty million tonnes of coal were sterilised after the 1994 Moura disaster (internal DNRME figures). Since Moura, events at the Grosvenor Mine on 6th May resulted in further sterilisation of coal, and events at Cook Colliery and North Goonyella resulted in significant sterilisation of coal. It is not clear how much could be expected from a future Queensland underground coal mining disaster.

Statutory position holders and competency requirements

There is a proposal to turn existing critical safety roles into statutory positions at mines with position holders requiring competency certificates. This is likely to increase the pool of competent staff across Australia and increase certainty in the capability of mine workers regardless of where they were certified. This will also increase the status and credibility of the role of statutory position holders, which could increase the safety culture in mines (Reason, 1997).

The number of candidates for statutory positions expected in the three transitional years is 744, or 248 per year. These will not all be new full-time employees – rather they are requirements that may be met by existing staff when appropriately trained. The distribution over the different industries is shown in Tables 11 and 12 (below).

The proposed additional certificates of competency require both a written and oral exam.

Table 11 - Number of statutory positions (Coal underground⁴⁵)

Role	Number of mines	Number per mine	Total statutory positions	Assessment (assumed for purposes of this study)
Electrical engineering manager	14	2	28	BoE written and oral exams
Mechanical engineering manager	14	2	28	BoE written and oral exams
First class mine manager	14	1	14	BoE written and oral exams

Table 12 - Number of statutory positions (Coal surface⁴⁶)

Role	Number of mines	Number per mine	Total statutory positions	Assessment (assumed for purposes of this study)
Mechanical engineering manager	48	2	96	BoE written and oral exams
Mine manager	48	2	96	BoE written and oral exams

Note: it is envisaged that most positions will not require new employees, but rather will be met by existing employees with new certification requirements. There may also be some employees who already have these qualifications (as outlined in Tables 13 and 14 below), which means that these position estimates are upper bound estimates. Tables 13 and 14 (below) show current and proposed certificate of competency requirements for statutory positions in underground and surface mines respectively.

⁴⁵ Certificates/notice already issued for UMM, deputy; SSE already required to pass legislation exam so there will be no additional requirements for these positions.

⁴⁶ Certificate/notice already issued for open cut examiner; SSE already required to pass legislation exam so there will be no additional requirements for these positions.

Table 13 - Current and proposed certificate of competency requirements for statutory positions (coal underground)

Position / function	Currently exists at Qld mines	Currently referred to in legislation	Current certificate requirement	Proposed certificate requirement
Site senior executive	Yes	Yes	No ⁴⁷	First class mine manager certificate of competency (underground coal mines) ⁴⁸
Underground mine manager	Yes	Yes	Yes ⁴⁹	No change
ERZ controller	Yes	Yes	Yes ⁵⁰	No change
Electrical engineering manager	Yes	Yes ⁵¹	No	Electrical engineering manager certificate of competency (underground coal mines) ⁵²
Mechanical engineering manager	Yes	Yes ⁵³	No	Mechanical engineering manager certificate of competency (underground coal mines) ⁵⁴
Ventilation Officer	Yes	Yes	Yes ⁵⁵	No change
Industry safety and health representative	Yes	Yes	Yes ⁵⁶	No change

⁴⁷ Required to hold an SSE notice (issued by the BoE) which requires passing a legislation exam administered by the BoE.

⁴⁸ This certificate of competency already exists in Qld.

⁴⁹ First class mine manager's certificate of competency.

⁵⁰ Deputy's first class mine manager's or second class mine manager's certificate of competency.

⁵¹ Position not specifically named, but function identified in legislation – refer CMSHA, s.60(10) and CMSHR, sch 7, item 3(a).

⁵² This is a new certificate of competency for Qld. A person holding an equivalent interstate certificate of competency would be able to apply to have their interstate certificate recognised by mutual recognition.

⁵³ Position not specifically named, but function identified in legislation – refer CMSHA, s.60(10) and CMSHR, sch 7, item 3(b).

⁵⁴ This is a new certificate of competency for Qld. A person holding an equivalent interstate certificate of competency would be able to apply to have their interstate certificate recognised by mutual recognition.

⁵⁵ Ventilation officer's certificate of competency required from 11 November 2019 - note the current three-year transitional period ends on 11 November 2022.

⁵⁶ Deputy's, first class mine manager's or second class mine manager's certificate of competency.

Table 14 - Current and proposed certificate of competency requirements for statutory positions (coal surface)

Position / function	Currently exists at Qld mines	Currently referred to in legislation	Current certificate requirement	Proposed certificate requirement
Site senior executive	Yes	Yes	No ⁵⁷	No change
Surface mine manager	Yes	No	No	Surface mine manager certificate of competency ⁵⁸
Electrical engineering manager	Yes	Yes ⁵⁹	No	No change
Mechanical engineering manager	Yes	Yes ⁶⁰	No	Mechanical engineering manager certificate of competency (surface coal mines) ⁶¹
Open-cut examiner	Yes	Yes	Yes ⁶²	No change
Industry safety and health representative	Yes	Yes	Yes ⁶³	No change

Costs

The proposal to increase the number of statutory position holders has implications for the costs, as this means that certificates of competency will be required. As noted above, it is not assumed that most of the new roles will be filled by dedicated new full-time staff, but rather that most existing staff will have responsibilities that require certification. The cost of this certification is discussed here.

⁵⁷ Required to hold an SSE notice (issued by the BoE) which requires passing a legislation exam administered by the BoE.

⁵⁸ This is a new certificate of competency for Qld. A person holding an equivalent interstate certificate of competency would be able to apply to have their interstate certificate recognised by mutual recognition.

⁵⁹ Position not specifically named, but function identified in legislation – refer CMSHR, sch 7, item 3(a).
Note - CMSHR, schedule 7, item 3(a) is not limited to underground and ‘Surface Electrical Engineering Manager’ is mentioned current [Competencies recognised by the CMSHAC](#).

⁶⁰ Position not specifically named, but function identified in legislation – refer CMSHR, sch 7, item 3(b).
Note - CMSHR, sch 7, item 3(b) not limited to underground, but function not mention in relation to surface mine in current [Competencies recognised by the CMSHAC](#).

⁶¹ This is a new certificate of competency for Qld. A person holding an equivalent interstate certificate of competency would be able to apply to have their interstate certificate recognised by mutual recognition.

⁶² Open cut examiner’s certificate of competency.

⁶³ Deputy’s , first class mine manager’s or second class mine manager’s certificate of competency.

Certification cost increase

The number of positions requiring certificates is outlined in Tables 11 and 12 above. It is assumed the cost of meeting the statutory positions will not start for one year, and then will be spread over three years due to transition arrangements. When calculating the overall cost for the 10-year period, there is allowance made for 10 per cent turnover p.a. after this initial period (i.e., for the last six years).

There is a cost associated with the new position holders gaining their certification, made up of the time required for study and then actually sitting the exam.

There is a requirement to do BoE managed written and oral exams (see Table 15 below). Sitting the written test is assumed to take three hours, and the oral test two and a half hours. Travel time to each test is assumed to take two hours as well. Workers spend approximately one week in exam preparation for each exam. The total time taken for the exams is 45 hours for written BoE exams, and 44.5 for oral BoE exams. In total, the time taken for the non-mine-manager positions that require both a written and oral exam is 89.5 hours.

For the first class underground mine manager certificates, the cost is higher. As outlined in Table 16 (below), sitting the written test is assumed to take three hours, and the oral test five hours. Travel time to each test is assumed to take two hours as well. Workers spend approximately four weeks in exam preparation for each exam. The total time taken for the exams is 165 hours for written BoE exams, and 167 for oral BoE exams.

There is a 15 per cent (most positions) to 30 per cent (underground mine manager) failure rate for the exams that has also been taken into account.

In total certification costs applicants have approximately an average of \$1.0 million per year for the three years the positions are introduced.

In addition to these direct costs, there may be increased competition for scarce staff if it is necessary to have more people with certification. This could lead to an increase in recruiting costs (e.g., more effort needed to find people such as more ads) or increased salary costs or delays to projects if staff cannot be found. However, transitional arrangements will be negotiated with industry to minimise the impacts and as such these costs are expected to be minimal and are not quantified.

Table 15 - Summary of assumptions for statutory positions – BoE exams

Variable	Assumption/calculation
Number of statutory position holders	As per Tables 11 and 12
Preparation time for written and oral test	1 week per applicant for each type of exam (2 weeks if doing both written and oral)
Travel time to tests	2 hours
Test time	3 hours written, 2.5 hours oral
Total time	45 hours for written BoE exams, and 44.5 for oral BoE exams
Percentage re-sitting oral exam	15%

Table 16 - Summary of assumptions for statutory positions – BoE exam – Underground first class mine manager

Variable	Assumption/calculation
Number of statutory position holders	As per Tables 11 and 12
Preparation time for written and oral test	4 week per applicant for each type of exam (8 weeks if doing both written and oral)
Travel time to tests	2 hours
Test time	3 hours written; 5 hours oral
Total time	165 hours for written BoE exams, and 167 for oral BoE exams
Percentage re-sitting oral exam	30%

Workload increase for RSHQ and the BoE

Associated with the existing critical safety roles becoming statutory positions for coal mines is an increase in the workload for the BoE. This Board is currently made up of eight members consisting of three inspectors and five industry and union representatives. The inspectors write the exam. All members of the Board are responsible for marking written exams. Over the last three years, there was an average of 50 certificates issued each year (BoE annual report).

Inspectors are responsible for developing and testing exam papers. At present, this takes one month of work for an inspector for the written exams. Assuming a 38-hour work week, and the average number of certificates issued in the last three years (65 certificates), this is approximately 2.4 hours of work per certificate issued. Refer to Table 17 (below) for a summary of the BoE workload assumptions discussed below.

Marking written exams takes 1.5 hours per exam for any member for the BoE.

For the full BoE oral exam, inspectors spend approximately four weeks to prepare, assess and mark exams for 10 applicants. This is 15.2 hours per applicant.

The cost for the industry representatives consists of the time they spend marking written exams (1.5 hours per exam) and assessing oral exams (2.5 hours per exam plus one hour discussing candidate).

The number of applicants needing to re-sit their exams is based on the outcomes of the BoE exams for the last three years.

These are conservative estimates as they do not incorporate any travel time for panel members.

In addition to this estimate of the cost of the time involved, it should be borne in mind that greater effort will have to be made to find people who have the time and are willing to sit on the oral examination panel. The Board is already struggling to find enough volunteers to sit on the panels and mark exams in a timely manner. The administration of the process will need to take action to negate possible delays to the process of certification.

Room cost hire may increase as the capacity of regional rooms that are currently provided for free is strained. However, this cost is likely to be relatively small and is not assessed here.

The BoE secretariat itself will face some increased costs of processing the new statutory certificates. Here it is assumed that it takes two hours per certificate.

The total cost to the industry and RSHQ of preparing and marking all of these types of exams is approximately \$231,000 per year for the three years of introduction.

Table 17 - Summary of assumptions for BoE workload coal mine exams

Variable	Assumption/calculation
Number of certificates issued	As per Tables 11 and 12
Number of BoE members – written exam	3 inspectors plus 5 industry/union representatives
Number of panel members – oral exam	1 inspector plus 2 industry/union representatives
Cost to inspectorate – preparing written exam	2.5 hours per exam (one month per written exam prepared, assuming only one per year here)
Cost to inspectorate marking written exam	1.5 hours per exam (one examiner per exam)
Cost to inspectorate – oral exam	15.2 hours per exam
Cost to industry – written exam	1.5 hours per exam
Cost to industry – oral exam	3.5 hours per exam

The workload of the secretariat, the BoE members and the oral panels will undoubtedly increase. It will be necessary to consider the adoption of innovative examination and testing technology which is in use in many Australian universities and training organisations. Alternatively internal reallocation of resources may be required to ensure that the priority of examination and certification applicants.

Fees that help support the secretariat are not considered in this analysis, as they represent a transfer of funds from one party to another, and thus do not change the overall outcome of the analysis.

It is possible there could be some impacts on competitiveness, employment and workforce mobility and career progression. There might also be impacts on costs associated with backfilling roles or acting arrangements while staff are at training or on leave. This would include persons appointed to act as an SSE for an underground coal mine during an SSE’s absence of more than 14 days and a person left in charge of an underground coal mine in the absence of an UMM.⁶⁴ This impact will be mitigated by the presence of employees who hold the certificates already, which increases the size of the available labour pool. However, given that only a handful of mining jobs (262 positions out of 72,600 total (ABS 2022)) are impacted it is likely these impacts will be small.

Overall cost

The Present Value (PV) of costs is presented in Table 18. These represent the future value of costs over the 10-year policy period in today’s value with a seven percent discount rate. The total cost is \$3.9 million.

Table 18 - Present value of costs⁶⁵

Value	Costs
Present value of costs	\$3.9 million
Equivalent annual value	\$597,968

⁶⁴ Refer ‘Competency for key critical safety roles’ topic for further information regarding proposed changes about qualifications of persons in key safety roles during absences.

⁶⁵ Discount rate seven per cent over 10 years.

Illustrative quantification of safety benefits

For this study it has not been possible to robustly quantify these safety benefits offered by the proposals. This is due to uncertainty over quantifying:

- The risk of fatalities, and an underground coal disaster if no intervention occurs (i.e., the baseline risk of an underground coal mining disaster).
- The likely reduction in baseline risk of disaster as a result of the proposals.
- The likely reduction in risk of injury from the proposed Queensland policies. Aggregated data on the causes of current injuries is not available, and so it is difficult to quantify the likely impact of proposed changes to future injury rates in Queensland. This challenge to quantify robustly echoes the findings of Access Economics (2011) who also noted that lack of data on reasons for current injuries as well as challenges of modelling changes due to new regulations.

However, some illustrative figures are presented here to help complement the costing analysis and put the costs into context. These are all based on expert opinion from the RSHQ.

We have modelled three scenarios around benefits, a low, medium and high benefits scenario with varying levels of baseline risk and effectiveness of the proposals in reducing the risk. The medium scenario has similar assumptions as those modelled in the 2013 RIS for a package of measures including additional certificates of competency and explosion barriers. Although more safety standards (including a ventilation officer's certificate of competency) have been implemented since that RIS, in the view of the RSHQ there has also been an increase in risk due to deeper, gassier underground coal mines with higher production levels. Surface mines are also facing more hazardous conditions with the depth of cover increasing, highwalls becoming steeper and higher, mine strike distances becoming longer, all of which is increasing the risk of instability and unplanned events, evidenced by the numerous incidents that have resulted in fatalities and high potential incidents in the surface mines.

We have included no benefits for year one, and then only half the benefits for the three-year transition period.

The figures here and in the summary are for the medium benefits scenario. It is the expert opinion of RSHQ that this is a conservative scenario as they expect that baseline risk is likely to be higher and the effectiveness of the proposals greater than in this scenario. The other scenarios are outlined in the sensitivity analysis.

Using the Safe Work Australia figure for the value of injuries, and following their assumption of a two per cent growth in injuries per year in mining in the status quo baseline due to increased employment:

- If there is a two per cent fall in injuries each year over the six years that all new regulations are in place (and a one per cent fall each year in the years two-four due to the transitional period), this is a value of **\$787,000** a year for the main period after transition.

There is little concrete evidence for the baseline risk of coal mining disasters in Queensland, or the potential impact of a disaster (especially about the permanent loss of coal resources that might occur). However, if:

- There is a five per cent baseline risk of disaster in underground coal mines (i.e., each year there is a five per cent risk that there will be an underground coal mining disaster).
- The reforms reduce the risk of an underground coal mining disaster by 20 per cent in each year.

Then the associated benefits could be:

- **\$612,000** year in reduced fatalities.
- **\$8.3 million** per year in reduced risk of loss in production for one year as the mine is shut for investigation. Here an average forecast coal price of \$147/tonne is used (REQ 2021) weighted by the average proportion of thermal and metallurgical coal produced by Queensland in the last three years. The net economic loss resulting from this loss of production is estimated at 70 per cent of the value of coal mining lost. This is based on data from national input-output tables (ABS 2009).
- **\$2.9 million per year** in reducing the risk of a permanent loss in coal (sterilisation) of 2 million tonnes (based on an average coal mine that has two-thirds of its resources remaining and loses one per cent to sterilisation). This is likely to be a conservative estimate as there is potential for far greater loss of coal resources after a disaster. Approximately, 33 million tonnes of coal was excluded from production at Moura after the 1994 disaster (DNRME internal sources).

The present value of these disaster risk reduction benefits is \$65.7 million, or annual equivalent value of \$10.1 million a year.

If used in a net present value calculation with the costs documented in the rest of this analysis, the benefits would outweigh the costs by \$61.8 million as a present value (EAV \$9.5 million).

Even if only injury reduction was taken into account, the benefits outweigh the costs by \$4.1 million as a present value (EAV \$625,080).

The low benefits scenario (with 0.5-1 per cent reduction in injuries and a 2.5 per cent reduction in fatalities) had a present value for the benefits of \$11 million (EAV \$1.7 million). The high benefits scenario (2-4 per cent reduction in injuries and five per cent reduction in fatalities) had a present value of \$123.5 million (EAV \$19.0 million).

The majority of these benefits fall directly to the mines themselves. It is not clear why they would not act to avert these costs. It is possible the costs are either not perceived accurately, or that they are very low per mine when spread over all the mines in Queensland (48 surface mines and 14 underground).

Distributional impacts

A detailed distributional analysis was not undertaken for this report as there was not expected to be a wide distribution of costs and benefits between different sectors. For this reason, transfer values (which are payments that essentially shift the same resources from one sector to another) such as royalties have not been included.

In general, the costs will be borne by the coal mining sector. The new statutory positions are around three quarters of the costs. In addition to these direct costs of the policy options there is an industry levy that funds the Mines Inspectorate. As a result, there are limited costs to government or the wider community.

The majority benefits of the policy options are likely to be felt by mining companies, with almost 90 per cent of the benefits in the illustrative quantification relating to reduced risk to production and sterilisation. Mining employees and contractors would benefit from the reduced injuries and deaths. A report estimated that workers and their families bear almost three-quarters of the cost of injuries (PC 2012). Mining communities will also benefit from the reduction in injuries and risk of mining disaster.

Sensitivity analysis

A sensitivity analysis on the discount rate was undertaken at three per cent and 10 per cent (refer Tables 19 and 20).

Table 19 - Present value of costs at a three per cent discount rate

Value	Costs
Present value of costs	\$4,297,917
Equivalent annual value	\$551,998

Table 20 - Present value of costs at a 10 per cent discount rate

Value	Costs
Present value of costs	\$3,638,183
Equivalent annual value	\$631,736

These costs are not very different to those under the seven per cent discount rate in Table 18 (above), which suggests this is not a key variable of concern.

There are no cost estimates that stand out as lending themselves to sensitivity analysis. All costs are reasonably low.

The scenario created to illustrate potential benefits was based on expert opinion from the RSHQ. As such these assumptions were sensitivity tested to demonstrate the potential range of benefits that might occur from the proposed reforms. The medium scenario presented earlier was conservative in their opinion. However, a package of even more conservative assumption were pulled together for a “low benefits” scenario, and more optimistic assumptions for a “high benefits” scenario.

The low benefits scenario assumes:

- A baseline risk of disaster 2.5 per cent, and a five per cent reduction in this risk
- Reduction in injuries of 0.5 per cent a year for the three transition years, then one per cent a year
- A 2.5 per cent reduction in the number of fatalities a year

The PV benefits for the low benefits scenario are \$10,989,952, which is an annual equivalent value of \$1,686,809.

The high benefits scenario assumes:

- A baseline risk of disaster of 7.5 per cent, and a 25 per cent reduction in this risk
- Reduction in injuries of two per cent for the three transition years and then four per cent a year
- A 10 per cent reduction in fatalities in a year.

The PV benefits are \$123,548,319 which is an annual equivalent value of \$18,962,995.

References

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Appendix 3 – Further information on Option 3 (non-regulatory)

Rather than amending the resources safety legislation proposed in Option 1, Option 3 would see RSHQ undertake a broad educational program designed to assist the resources sector to adopt principles and practices of HROs. It is envisaged that this educational program would run for five years in total, an intensive two-year educational phase followed by three years of support activities, assisting the transition of the resources industry into business as usual.

The first two years would include focusing on the need for industry to implement critical controls, to identify precursors to fatalities and to use these to prevent accidents and fatalities. This program would also seek to focus industry attention on ensuring workers are appropriately trained and supervised for the tasks they undertake, and that contract labour is safely managed. This would need to be supported by the regulator wherever possible within existing legislative powers, including obtaining, analysing and proactively sharing safety learnings from incidents and fatalities.

The program would be solely focused on the resources industries as they will be most affected by the proposed improvements to processes. Existing communication channels would also be used to ensure that the messages are distributed to the widest audience possible.

The comprehensive two-year educational program would follow the initiatives already undertaken by the Mines Inspectorate in 2020-21 that engaged, communicated with and monitored these industries with the goal of improving reporting of HPIs, quality of investigations undertaken and the effectiveness of industry controls. Data analysis on trending, industry insights and regulation effectiveness measures would continue to be undertaken and disseminated within the industry by the newly formed Central Assessment and Performance unit who can provide key insights into these important safety and health variables.

Whilst comprehensive, it would be the intention to deliver the educational program within RSHQ's operating budget, funded from industry-sourced fees. However, if a more urgent matter arose, such as another serious incident in a mine, resources to deliver this educational package may be stretched.

Whilst more attractive than Option 2, which would provide no safety and health improvements, this option is not seen as a viable as the measures are not sufficient to achieve the objective to support the Queensland resources industry to protect workers through implementing approaches consistent with HRO theory in order to reduce the rates of serious accidents and fatalities. It also does not implement the findings of the Bol which the Government has committed to implementing.

Participation in the safety and health reforms as outlined would be on a voluntary basis only as there would be no legislative imperative. The positive impacts of the reforms could then be severely reduced depending upon the uptake by industry.

Appendix 4 – Mutual recognition of interstate certificates

Table 21 shows examples of interstate certificates of competency that are potentially equivalent to the proposed new Queensland certificate of competency requirements for underground SSEs, underground electrical engineering managers, underground and surface mechanical engineering managers and surface mine managers.⁶⁶ A person holding an equivalent interstate certificate of competency would be able to apply to have their interstate certificate recognised by mutual recognition.

Table 21 - Examples of potentially equivalent interstate certificates of competency under mutual recognition

Position / function	Proposed new Qld certificate of competency requirements	Potentially equivalent interstate certificates (NSW)
Site senior executive (underground coal)	first class mine manager certificate of competency (underground coal mines) ⁶⁷	Mining engineering manager of underground coal mines
Electrical engineering manager (underground coal)	Electrical engineering manager certificate of competency (underground coal mines)	Electrical engineering manager of underground coal mines
Mechanical engineering manager (underground coal)	Mechanical engineering manager certificate of competency (underground coal mines)	Mechanical engineering manager of underground coal mines
Surface mine manager (surface coal)	Surface mine manager certificate of competency	Mining engineering manager of coal mines other than underground mines
Mechanical engineering manager (surface coal)	Mechanical engineering manager certificate of competency (surface coal mines)	Mechanical engineer of coal mines other than underground mines

⁶⁶ Refer 'Competency for key critical safety roles' section and Appendix 2 for further information.

⁶⁷ Note - this certificate of competency already exists in Qld.

Appendix 5 – Proposed structure of SSHC

Details	Proposal
Name of committee	Site safety and health committee (SSHC).
Who calls the committee	As per the BoI Recommendation 27 and consistently with the MQSHA, the SSHC will be established upon the request of the SSHR or when directed by the chief inspector.
Membership	<p>The committee will be comprised of at least two members being:</p> <ol style="list-style-type: none"> an SSHR for the mine or part; and the SSE for the mine or part or the SSEs representative. <p>The SSHC may include other members (nominated members) nominated by the SSE and the workers.</p> <p>A SSHC member must be a worker in the mine or part.</p> <p>At least half the nominated members must be workers nominated by workers and must work in the area of the mine covered by the SSHC.</p> <p>Maximum penalty: 100 penalty units is the current value under MQSHA; it is proposed to maintain this value under the proposal.</p>
Functions	<ol style="list-style-type: none"> to facilitate consultation and cooperation between management and workers in initiating, developing and implementing management of risk from operations; to encourage an active interest in safety and health matters at the mine; to review the circumstances of injuries, illness and HPIs, and recommend appropriate action; to consider any proposed changes to operations that may reasonably be expected to affect the control of risk, and make appropriate recommendations; to carry out inspections; to consider matters referred to the committee by a safety and health representative; to help in the resolution of safety and health issues; to perform other functions to promote safety and health.
Conduct of meetings	<p>Times of meetings of a SSHC are to be held at the times it decides but must be held at least once every three months.</p> <p>A SSHC must keep minutes of its meetings but may otherwise conduct its proceedings in the way it decides.</p> <p>The SSE must make the minutes of a meeting of a SSHC available at all</p>

	<p>reasonable times for inspection by workers at the mine and by an inspector.</p> <p>Maximum penalty for not making the minutes available: 40 penalty units is the current value under MQSHA; it is proposed to maintain this value under the proposal.</p>
Enabling committee	<p>The MQSHA and the WHSA contain provisions that enable the committee to carry out its functions, such as providing for time and for facilities. This is primarily through section 104 of the MQSHA. It is proposed to adopt the MQSHA approach, as described below, except to the extent of its penalties.</p> <p>It is considered that the penalty provisions under the MQSHA are not adequate, and they should be amended to align with the same level of penalty under section 79 of the WHSA, which provides for the establishment of the SSHC as part of the duties of the person conducting business or undertaking (100 penalty units) and section 98 of the MQSHA, which establishes the committee (100 penalty units).</p> <p>The SSE must:</p> <ol style="list-style-type: none"> a. provide appropriate training during working time to persons selected or elected to be site safety health representatives (SSHRs) within three months of selection or election; and b. provide to SSHCs access to appropriate facilities necessary to perform their functions; and c. ensure that SSHRs and committee members receive their normal pay for time spent: <ol style="list-style-type: none"> i. in performing their functions; or ii. undergoing training for a safety and health competency established by the committee for a SSHR. <p>Maximum penalty: proposed 100 penalty units (current value in the MQSHA is 40 penalty units).</p> <p>The legislation allows for the establishment of the committee, for it to have a lesser imposition for facilitating the functions of the committee would defeat the intention of having the committee. In other words, if the legislation is going to impose a penalty for not establishing the committee, the same penalty should apply for not facilitating the committee once established. This level of penalty would also be consistent with the WHSA, which is 100 penalty units.</p>
Function of SSHR	<p>Under the MQSHA, one of the functions of the SSHR is to be able to refer safety and health matters to the SSHC, it is proposed to carry this function over to the proposed SSHC under CMSHA.</p>

Attachment 1 – Brady Review recommendations

Recommendation 1: The industry should recognise that it has a fatality cycle. Unless it makes significant changes to how it operates, the rate of fatalities is likely to continue at current levels. This pattern has been evident over the past 19½ years and is characterised by periods where a significant number of fatalities occur, followed by periods where there are few to none. This suggests that the industry goes through periods of increasing and decreasing vigilance. Past behaviour suggests that in the order of 12 fatalities are likely to occur over any 5-year period.

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. Recommendations 3 to 5 cover the key causal factors identified in this review.

Recommendation 3: The industry needs to focus on ensuring workers are appropriately trained for the specific tasks they are undertaking.

Recommendation 4: The industry needs to focus on ensuring workers are appropriately supervised for the tasks they are undertaking.

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 6: The industry should adopt the principles of High Reliability Organisation theory in order to reduce the rate of Serious Accidents and fatalities. At its most fundamental level, High Reliability Organisation theory focuses on identifying the incidents that are the precursors to larger failures and uses this information to prevent these failures occurring. Adopting a High Reliability Organisation approach will require the refinement or addition of specific competencies to both the mining industry and the Regulator.

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.

Attachment 2 – Summary of previous certificates of competency stakeholder concerns

Previously in 2013, the Queensland Mine Safety Framework Consultation Regulatory Impact Statement (the 2013 CRIS) contained a proposal for 16 existing safety critical statutory positions to be required to have a certificate of competency. In addition, there were other important safety roles which were proposed to have minimum competencies prescribed but not require a BoE certificate of competency. As a result, the certificate of competency requirement for ventilation officers was progressed.

These proposals were to ensure that people with sufficient experience, expertise and understanding of statutory obligations worked in the complex and hazardous mining processes. Ensuring persons in statutory positions had the appropriate competencies and understand the critical mining principles and procedures was to assist in ensuring safety and health standards were upheld as well as achieving improved productivity at mines. Competency of those in existing safety critical positions was already required by the legislation. Requiring additional certificates of competency was essentially related to additional training and certification requirements which is a form of auditing and greater assurance of competency.

It was also to enable the Mines Inspectorate to more comprehensively audit and respond to concerns about competency and registered training organisations. It was to facilitate a more proactive approach to take action at the earliest possible stage – the training level; and assist industry to ensure competency rather than the Inspectorate continually issuing directives, while a mine continues to be exposed to risks if competent persons are not in safety critical positions. In extreme cases a mine may be required to suspend production. It was to provide greater assurance to the regulator and to operators and SSEs who were directly responsible for ensuring appointees have appropriate competencies. It was also to improve labour mobility and to increase competency requirements across major mining states.

In consultation through the 2013 CRIS, while there was some union and worker support for the proposals, some of industry raised the following concerns about the [then] certificates of competency proposal:

- Insufficient evidence to justify as it relies on subjective concerns of the Inspectorate.
- The additional cost is not justified.
- There were no equivalent requirements in other high risk industries for certificates of competency.
- Capability of the BoE to handle the increased number of certificates of competency.

Evidence to support the 2013 proposed certificates of competency included:

- Compliance action over the previous 10 years (directives, substandard condition or practice notices and mine record entries). The large number of compliance actions indicated that while individual instances of deficient competency may have been addressed on a case-by-case basis, the underlying system deficiencies were not. Lifting the standards of competency was to tackle the underlying systemic failures and ensure continuity of competency was achieved proactively for all activities, not just on an individual case by case basis and only at a point in time.
- A large failure rate for applications for certificates of competency, which had already been endorsed by SSEs as attesting to the individual's readiness.
- Reviews into previous mining disasters in Australia have made repeated findings relating to knowledge, training and competency e.g., Moura No 2 (1984) and Moura No 4 (1986).

Industry submissions did not address the practical impacts and costs of implementation. The proposals for additional certificates of competency did not seek to create additional positions at mines as all of these positions existed. The proposals merely sought to require occupants of these positions to have an independent check by the BoE of the competency requirements already established by the CMSHAC and MSHAC. Industry people outnumbered the government people on the BoE and therefore industry would make the decisions about the competency of people for industry.

In terms of industry raising additional training costs - these training costs already existed if mines were training people to meet the current legislative requirement that people in these roles are competent. The practical impact of the proposed statutory position amendments was limited to the additional step of having competency certified by the BoE and the preparatory work and prerequisites required of the applicant for that step. The proposal for additional certificates of competency added an independent quality assurance step as the applicant should already have the necessary training and qualifications and they should know how to comply with legislation relevant to their role.

Industry's comment concerning there being no similar requirements in other high-risk industries for practising certificates of competency was incorrect e.g., the occupational licences and registrations for the construction industry, and the numerous ones for electrical licences.

In relation to the concerns regarding the BoE being able to handle the additional volume of certificates of competency – a review was undertaken of the examination processes with the objective of streamlining the application process and written examination process and improvements were implemented.

Attachment 3 – University of Queensland review recommendations

In 2019, the [then] Queensland Commissioner for Mine Safety and Health, the Coal Mining Safety and Health Advisory Committee (CMSHAC), and the Mining and Quarrying Safety and Health Advisory Committee (MSHAC) collaborated with the University of Queensland (UQ) to fulfil a [then] statutory function of the CMSHAC and MSHAC. This function was to periodically review the effectiveness of the respective Mining Safety Acts and subordinate legislation. Amendments in 2020 to the CMSHA and MQSHA removed this statutory role for CMSHAC and MSHAC to instead provide them with a more strategic role. RSHQ is responsible for leading legislative amendments to the Acts, and this process involves consultation across interested stakeholders. UQ prepared two reports (the UQ Reports) to assist CMSHAC and MSHAC prepare advice and recommendations for the Minister about promoting and protecting the safety and health of persons at coal mines, metalliferous mines, and quarries. UQ consulted with a range of stakeholders before finalising the Reports.

The UQ Reports made multiple recommendations about whether particular provisions are clear, current and comprehensive. UQ did not evaluate the effectiveness of the legislative frameworks. In 2020, CMSHAC and MSHAC tripartite subcommittees comprehensively reviewed the recommendations of the UQ Reports. If tripartite subcommittee agreement was reached about a particular UQ Reports proposal, and if it was then endorsed by CMSHAC or MSHAC, that proposal has been reviewed and categorised by RSHQ, in terms of highest priority. High priority proposals with tripartite support that can be progressed will improve the clarity and precision of the legislation. Some of the proposed amendments will also improve the workability of the legislation and are further strengthened by amendments identified as emanating from the Bol recommendations. The proposals will thus contribute to the continuous improvement of the legislation for the benefit of all stakeholders.

Proposed change

The proposed legislation changes result from the UQ Review recommendations are outlined in Table 22 below.

Table 22 - Proposed legislation changes

Section	Problem	Proposed solution
MQSHA, s.10 - Meaning of operations	<p>The meaning of “operations” in relation to winning and treating, and hard rock are unclear and confusion has arisen relating to when MQSHA applies.</p> <p>The MQSHA needs to clearly apply to operations for the treating of minerals, regardless of whether the winning of the minerals is also occurring at the same time, and to operations involving any type of rock i.e., hard or soft rock.</p>	<p>Clarify the meaning of winning and treating by ensuring that operations include treating minerals or rock, even if winning has ceased at the time. Treating should be categorised as a separate activity so that where it occurs on land the subject of a mining tenure, or where it should be subject to a mining tenure, in the case of illegal mining, it is regulated under the MQSHA.</p> <p>This would still exclude smelting, refining, stockpiling, or processing on land that is near a mining tenure, and not integral to the winning occurring within an adjoining or nearby tenure.</p>
MQSHA, s.11 - Meaning of quarry	<p>Stakeholders have regularly questioned whether it is only the extraction of river gravel that is outside the meaning of a “quarry”, or the extraction of all gravel, leading to uncertainty about whether the MQSHA applies in some scenarios.</p>	<p>The proposed amendment will confirm that only the extraction of river gravel, rather than all gravel will be outside the definition of a quarry.</p>
MQSHA, s.9 and CMSHA, s.9 - Meaning of mine/coal mine	<p>Both internal and external stakeholders have expressed difficulty in determining whether operations are adjoining or contiguous with the mining tenure in certain circumstances.</p>	<p>It is proposed that the term “contiguous with” will be deleted, and the terms “adjoining”, and “adjacent to” will be retained.</p>
CMSHA, s.26 and MQSHA, s.23 - Meaning of supervisor	<p>Some confusion has been reported as to the meaning of the term supervisor as they are ‘authorised’ by a SSE which is not consistent with other sections covering how other statutory position holders are ‘appointed’.</p> <p>The meaning also lacks the specific obligations expected of supervisors.</p>	<p>Amend the definition of “supervisor” in the CMSHA and the MQSHA, so that a supervisor is “appointed” by the SSE, in a similar way to others in safety critical positions at mines.</p> <p>Confirm supervision requirements under the CMSHR in a similar way to how they are covered under the MQSHR section 96.</p>

Section	Problem	Proposed solution
		<p>Safety and health obligations of supervisors will be added to the MQSHA and the CMSHA and will include:</p> <ul style="list-style-type: none"> • Ensuring only competent workers perform tasks • Applying and monitoring controls required by the SHMS including critical risk controls to ensure they are implemented and effective • Inspecting work sites and observing how tasks are undertaken.
<p>CMSHA, s.101 and MQSHA, s.94 - Stopping operations by SSHRs</p>	<p>SSHR who stop operations at a mine need only notify SSEs. If operations have been stopped by a SSHR at a mine, then there is reasonable belief that the operations posed a serious danger to the safety and health of workers.</p> <p>Inspectors and industry safety and health representatives/district workers' representatives must also be informed about the serious danger that lead to the stopping of operations, and not only the SSE.</p>	<p>Ensure that SSHR who stop operations at a mine must notify SSEs, inspectors, and industry safety and health representatives/district workers' representatives.</p> <p>The broader notifications allow input and reinforcement from inspectors and industry safety and health representatives/district workers' representatives who also have key roles in promoting and upholding a HRO culture.</p>
<p>CMSHA, s.100 and MQSHA, s.93 - Powers of SSHRs</p>	<p>SSHR cannot easily and effectively fulfill their safety and health functions as they are unable to access information in any form that it is being kept, including electronically.</p>	<p>Ensure that the SSHR are able to make copies, or request copies of any documents relevant to safety and health, and to access SHMS documents at all places at a mine where the documents are available (e.g. through a supervisor's tablet).</p>
<p>CMSHA, s.119 and MQSHA, s.116 - Powers of district workers' representatives</p>	<p>An anomaly has been identified in these provisions between the documents the industry safety and health representatives/district workers' representatives can examine</p>	<p>Ensure that industry safety and health representatives/district workers' representatives are able to copy documents amenable to examination under this section.</p>

Section	Problem	Proposed solution
	<p>and those that they can copy.</p> <p>There is no provision to allow an industry safety and health representative/district workers' representative to require certain documents to be provided to them within a reasonable period of time. It is unreasonable to expect these safety representatives to attend a mine in person to view parts of the SHMS and to personally photocopy documents.</p>	<p>In addition, ensure access to these documents within a reasonable specified period, or to have these documents provided to them, within a reasonable period of time.</p>
<p>CMSHA, ss.93 to 98 and sections of the CMSHR about the election of SSHRs</p>	<p>The existing SSHR election process in the CMSHA and CMSHR does not facilitate timely elections.</p> <p>There is no clear meaning of practical miner in section 94 CMSHA. In particular circumstances this section allows coal mine workers to elect 2 coal mine workers who are practical miners to inspect coal mining operations.</p> <p>The BoI has identified that the CMSHR does not require the returning officer for a ballot in respect of the election of a SSHR to give notice of the result of the ballot to the industry safety and health representative.</p>	<p>It is proposed that a similar election process, and process for determining the number of site safety and health representatives to that in the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 (NSW) will replace the existing site safety and health representative election process and put a cap on numbers of SSHRs in the CMSHA and CMSHR.</p> <p>It is proposed that practical miner will be defined as a coal mine worker who has at least 2 years' experience in the coal mining operations for which the coal mining workers consider risk is not at an acceptable level.</p> <p>Ensure that the industry safety and health representatives are routinely informed of the outcome of site safety and health elections.</p>

Impacts and benefits

- There will be no significant costs or impacts.
- The proposed amendments will clarify existing provisions or improve the workability of existing provisions.

Attachment 4 – Other minor amendments

Contemporary legislation provides the foundation for RSHQ to regulate safety and health effectively and efficiently in relation to resources industry operations. This is important because the resources safety and health regulatory framework, including the operation of RSHQ, is largely funded by industry via the safety and health fee paid by resources sector operators. Accordingly, RSHQ strives to ensure it delivers value for money as Queensland's resources safety and health regulator.

RSHQ's commitment to continuous improvement and data driven regulation routinely identify potential operational and administrative improvements for the four Resources Safety Acts. Issues currently identified which, if appropriately addressed, are expected to aid the effective and efficient administration of the legislation are outlined below.

Approval of forms by CEO

The approval of forms for use under the Resources Safety Acts, including the PG Act for a safety context, is currently by the relevant chief inspector. This approach is generally appropriate for the majority of forms; however, there are some safety and health related functions under the Resources Safety Acts which are overseen by the CEO, not the relevant chief inspector – e.g., relating to the setting of fees such as the safety and health fee and the coal mine workers' health scheme (the CMWH scheme). The day-to-day administration of these functions are undertaken by the Occupational Health and Finance teams (respectively) within RSHQ. In practice, a fee related form is approved by the Chief Operating Officer before again being formally approved by the chief inspector as currently required under the CMSHA. Similarly, a CMWH scheme related form is first approved by the Executive Director, Occupational Health before the second approval by the chief inspector. While a chief inspector can delegate their powers under the relevant Act, the delegation is limited to an inspector appointed under the relevant Act, which precludes both the Chief Operating Officer and the Executive Director, Occupational Health. It is inefficient requiring fee and health related form to be approved by the relevant heads of the RSHQ divisions who administer the relevant functions as well as the applicable chief inspector, who is not responsible for administering those functions under the legislation.

Activities for meaning of prohibited explosives

The Explosives Act establishes a framework for declaring an explosive to be a prohibited explosive in the Explosives Regulation 2017 (the Explosives Regulation). Schedule 1, Part 1 provides for four categories of prohibited explosives:

- Items 1 and 2 provide that small arms ammunition and ammunition containing explosives are prohibited (with particular exemptions provided for).
- Item 3 provides that an explosive containing a chlorate mixed with an ammonium salt is a prohibited explosive.
- Item 4 provides that particular types of fireworks are prohibited explosives.

Items 1 and 2 prescribe small arms ammunition and ammunition (respectively) as prohibited explosives. However, exemptions are created based on the way in which the small arms ammunition and ammunition are dealt with. Small arms ammunition is for example not a prohibited explosive if it is used as a distress signal or wildlife control device. Items 3 and 4 provide for particular types of explosives to be prohibited explosives.

When read as a whole it is clear that the intention of the Explosives legislation is to prohibit certain ammunition, whilst allowing limited handling by specified persons or with respect to specified activities associated with the ammunition. However, there is ambiguity with the prohibited explosives provision in the Act as it could be interpreted as the intention was only for types of explosives to be declared as prohibited explosives, rather than also permitting specified persons or activities associated with explosives. This ambiguity needs to be addressed.

Direction of explosives inspectors and authorised officers by Minister

Under the Explosives Act, explosives inspectors and authorised officers are currently subject to direction by the Minister. This is a legacy matter that serves no practical purpose, particularly when viewed in the context of how the Explosives Act is administered – i.e., since 1 July 2020, the Explosives Act is administered by RSHQ (an independent statutory body). Moreover, explosives inspector appointments (including to the role of chief inspector) are decided by the CEO, with authorised officers subsequently appointed under the Explosives Act by the chief inspector of explosives. In this context, the current arrangements do not provide a sufficient separation of powers between the Minister and officers of the independent statutory body responsible for administering the Explosives Act. It is considered more appropriate that the CEO can direct the activities of explosives inspectors and authorised officers as opposed to the Minister.

Requirement to give name and address

Inspectors' powers under the four Resources Safety Acts each include provisions enabling an inspector to require a person to give and verify details including their name and address. Failing to do so when required to is an offence under the Mining Safety Acts (maximum penalty—40 penalty units) and the Explosives Act (maximum penalty—20 penalty units). However, there is an oversight with the PG Act which currently does not include an offence provision, even though the Act requires an inspector to warn a person that failing to provide the information is an offence. In addition, the Explosives Act contains two inconsistencies – namely the maximum penalty is inadequate when compared to the Mining Safety Acts and the address requirement is not limited to a person's residential address as it is with the other Resources Safety Acts. As a result, a postal or business address could currently be given, which could result in difficulties if a summons needs to be served.

Notice of explosives import or export

The Explosives Act requires an importer of explosives to advise the chief inspector in writing of the planned import of explosives and when those explosives arrive. This is to ensure imported products can be effectively monitored, controlled, and inspected as needed. Similarly, an explosives exporter is required to advise the chief inspector of any export of explosives for monitoring purposes. The Explosives Act currently does not specify timeframes for the notice requirements; however, explosives information bulletin 21, issued by the chief inspector, states that the notice must be at least seven days before the planned activity. There have been issues with some operators not giving sufficient notice, particularly in relation to import explosives. Consequently, this often doesn't provide sufficient time for the Explosives Inspectorate to schedule and conduct an inspection before the consignment is transported further. This is a potential safety and security risk, particularly for imported explosives if they do not meet the requirements of the Act (e.g., labelling, packaging, etc.) or are found not to be appropriately packed for safe onward transportation (e.g., as a result of a rough seas during shipping, etc.).

Notification of diseases

Under CMSHA notification requirements an SSE who receives a report of a reportable disease, such as coal workers' pneumoconiosis, is required to give an inspector and an industry safety and health representative notice about the disease occurrence. An SSE typically receives information about a reportable disease diagnosis of a worker through a health assessment report, under the CMWH scheme (prescribed by the CMSHR). A copy of the report is required, under the CMSHR, to be given by the appointed medical adviser to the worker's employer and RSHQ. An SSE may also receive a report about a disease from another source.

Notification of prescribed diseases by SSEs is one pathway that enables an understanding of disease occurrence across industry. However, there are several pathways whereby the regulator becomes aware of disease occurrences. RSHQ also receives reports of accepted workers' compensation claims for diseases from the Office of Industrial Relations and is progressing mechanisms to receive reports from Queensland Health through the Notifiable Dust Lung Disease Register recently established under the *Public Health Act 2005*.

The current SSE notification obligation can result in duplication and inefficiency in reporting requirements for SSEs and also the associated administration by RSHQ (i.e., reconciling duplicate reports). A worker diagnosed with a reportable disease may for example be reported more than once if an SSE receives more than one report about the disease occurrence, or if multiple SSEs receive a report about the same worker's disease occurrence. In almost every such scenario, RSHQ has already been made aware of the diagnosis via a separate mechanism (e.g., through the health assessment report given to the CEO under section 50A of the CMSHR).

The MQSHA also contains similar notification requirements concerning prescribed diseases and also has related issues involving duplication and inefficiency in reporting requirements.

While the notification of reportable diseases received by industry safety and health representatives (under the CMSHA) and district workers' representatives (under the MQSHA) provide information about disease occurrences; the information may not correlate to risk levels at specific mines or the industry (i.e., coal or mineral mines and quarries) because a disease may not have originated from the mine site where it was reported, or even from exposure in that industry sector.

A further issue is that the notification requirements for reportable diseases prescribed under the CMSHR and the MQSHR differ in terms of both the diseases prescribed, and the circumstances in which such a disease must be reported. The understanding of respiratory health conditions diagnosed in mine and quarry workers has evolved since these differing notification requirements were prescribed in the respective regulations. In addition, the long latency of certain diseases means that a worker may only be diagnosed after moving to a different mining industry sector or leaving the mining industry. A consistent list of prescribed diseases and circumstances for reporting is required across the CMSHR and MQSHR because workers from both the coal and mineral mines and quarries industries can potentially be at risk of contracting the same respiratory diseases, given many workers are employed across both industry sectors during their working lives. Clarifying the disease list and reporting circumstances will benefit all stakeholders.

Disclosure of information

Existing disclosure of information provisions under the Resources Safety Acts are too restrictive and currently prevent information sharing with non-resources agencies (e.g., Workplace Health and Safety Queensland), even where the information could assist in achieving improved safety and health outcomes. For instance, the Mining Safety Acts and the Explosives Act limit the general disclosure of information by the respective chief inspector to agencies administering laws about safety and health in mining or explosives [respectively]; and the RSHQ Act limits general disclosure of information by the CEO to a 'prescribed entity' – the meaning of which is limited under section 67 of the RSHQ Act to the chief executive of a department that administers a Resource Act, the Work Health and Safety Prosecutor or the director of public prosecutions. Accordingly, the current provisions are not sufficient to support an information sharing culture. This is also at odds with Safe Work Australia's National Compliance and Enforcement Policy, which stresses the importance of information sharing and collaboration between work health and safety regulators. This policy recognises the need for regulators to work collaboratively, sharing information and intelligence, tools and strategic initiatives, to ensure that regulators maintain a nationally consistent approach to compliance and enforcement and ensure emerging national issues are dealt with appropriately. The proposed amendments would facilitate safety and health related information disclosure to general work health and safety regulators.

RSHQ Act consequential amendments

On 1 July 2020, the RSHQ Act established RSHQ as the independent statutory body responsible for regulating safety and health in the Queensland resources sector. RSHQ's main functions are administering the Resources Safety Acts and to further their purposes. This is reflected in the Administrative Arrangements Order which lists RSHQ as the applicable administrative unit and the CEO as the applicable responsible head for administering the CMSHA, the Explosives Act, the MQSHA and the PG Act, Chapter 9, and Chapters 10 to 15 to the extent they relate to resource industry safety and health. The role and powers of the CEO are essentially akin to those of the chief executive (i.e., Director-General) of a government department.

Currently, RSHQ, the Department of Resources (DoR) and Queensland Treasury jointly administer the PG Act. RSHQ has administrative responsibility for resource industry safety and health related matters, DoR for tenures related matters and Queensland Treasury for royalties related matters. Note that there is some overlap and shared provisions between RSHQ and DoR.

Consequential amendments were made to the Resources Safety Acts, predominantly by the RSHQ Act, to accommodate the establishment of RSHQ on 1 July 2020. However, a few minor omissions and related issues have since been identified, including references to the ‘chief executive’ and ‘department’ that should have been changed to the ‘CEO’ and ‘RSHQ’ but were inadvertently missed at the time. Also, there was inconsistent treatment for making applications or giving or lodging documents as well as the relevant person for internal review of certain applications under the PG Act.

Another example relates to the approval of forms under the PG Act which currently allows both the chief executive and the chief inspector to approve forms under the PG Act. However, the chief inspectors’ powers are inadvertently limited further than they should be given the separation of RSHQ from DoR. Namely, the chief inspectors’ powers to approve forms are limited to forms under Chapters 7 to 10. This is an issue in relation to approval of a form for making an application for internal review of a decision under Chapter 12 about a safety and health related matter, as such a form must currently be approved by the chief executive of DoR – this form should also be able to be approved by the chief inspector for use in relation to an RSHQ internal review application. Other minor edits are also required to better align the Resources Safety Acts and reflect the structural shift of RSHQ being established as a standalone statutory body.

Proposed change

It is proposed to amend the Resources Safety Acts and to make consequential amendments to applicable regulations to address the abovementioned issues and to facilitate operational and administrative improvements. This would include the changes outlined in Table 23.

Table 23 - Proposed legislation changes

Topic	Proposed change
Approval of forms by CEO	Amend the four Resources Safety Acts to enable the CEO to approve forms for use under the respective Act relating to fees (i.e., forms about the safety and health fee); and to approve forms under the CMSHA about the health of persons who are, will be or have been employed at a coal mine (i.e., forms about the CMWH scheme).
Activities for meaning of prohibited explosives	Amend section 10 of the Explosives Act to clarify that a regulation may declare an explosive to be a prohibited type of explosive; and that the declaration may exclude the handling of an explosive in relation to specified activities or by specified persons from being a prohibited explosive. This change supports the current application of the legislation - it does not make any material changes to its application.

Direction of explosives inspectors and authorised officers by Minister	Amend sections 81(1)(a) and 105E(3) of the Explosives Act to provide that explosives inspectors and authorised officers are subject to the directions of the CEO instead of the Minister.
Requirement to give name and address	Amend section 96 of the Explosives Act to clarify that an inspector may require a person to state and give evidence to verify the person's residential address and to increase the maximum penalty for noncompliance at section 96(5) of the Explosives Act to 40 penalty units. Additionally, amend section 757 of the PG Act to insert an offence provision and a protection from liability provision and based on the amended section 96 of the Explosives Act (i.e. subsections (5) and (6) as amended for consistency above).
Notice of explosives import or export	Amend section 37 of the Explosives Act to clarify that the written notice of the intention to import or export an explosive must be given to the chief inspector at least seven days before the intended import or export date unless the authority holder has a reasonable excuse.
Notification of diseases	<p>It is proposed to amend the Mining Safety Acts, and make consequential amendments to the CMSHR and MQSHR, to streamline reportable disease notification obligations to achieve the following outcomes:</p> <ul style="list-style-type: none"> • to remove duplicative and/or unnecessary reportable disease notification requirements whilst ensuring the regulator still has appropriate oversight of prescribed disease occurrences across both mining industry sectors and industry safety and health representatives/district workers' representatives are aware of prescribed diseases in their respective industries; and • to improve consistency of the reportable diseases prescribed under the CMSHR and MQSHR, and the circumstances in which an SSE must notify of an occurrence. <p>The following proposed amendments aim to facilitate operational and administrative improvements and to facilitate consistent reporting obligations across the Queensland mining industry.</p> <ol style="list-style-type: none"> 1. Amend section 198 of the CMSHA and section 195 of the MQSHA to provide that for subsection (6), an SSE is not required to notify of an occurrence of a reportable disease to an inspector if information pertaining to the diagnosis of the disease is available to the CEO in the circumstances prescribed under a regulation. Note – refer also to consequential amendments at '3.' Below. 2. Amend section 198 of the CMSHA and section 195 of the MQSHA to clarify that an SSE is not required to report an occurrence of a reportable disease under subsection (6) if the SSE has already

	<p>previously reported the same disease occurrence (i.e., the same disease diagnosis relating to the same individual made at a point in time).</p> <p>3. Make consequential amendments to the CMSHR and MQSHR to prescribe the circumstances in which notification is not required. An example of such a circumstance may be if the SSE became aware of the diagnosis through a report in relation to an assessment under the CMSHR, Chapter 2, Part 6, Division 2 (e.g., a health assessment report).</p> <p>4. Amend existing prescribed disease provisions in the CMSHR and MQSHR to:</p> <ol style="list-style-type: none"> a. streamline and clarify the circumstances in which a prescribed disease must be reported by an SSE; and b. update the list of prescribed diseases to ensure consistency across the two regulations. <p>Note - RSHQ intends for the details of proposed amendments to the CMSHR and MQSHR (i.e., as mentioned at '3.' and '4.' above) to be developed further in consultation with key stakeholders.</p>
Disclosure of information	<p>Amend the Resources Safety Acts to better enable disclosure of information with government agencies responsible for administering safety and health laws as follows:</p> <ul style="list-style-type: none"> • Amend section 275A(2) of the CMSHA and section 255(2) of the MQSHA to broaden the application of these provisions to agencies administering a law about safety and health generally by omitting the current reference to 'in mining'. • Amend section 132(2) of the Explosives Act to also include reference to administering a law about safety and health. This is in addition to the current reference to a law about explosives (which is to remain). • Amend section 67(3) of the RSHQ Act to broaden the meaning of 'prescribed entity' to include the chief executive of a department, or agency of Queensland, the Commonwealth, or another State, that administers an Act about safety and health.
RSHQ Act consequential amendments	<p>Amend the Resources Safety Acts to include all identified outstanding consequential amendments related to the commencement of the RSHQ Act. The proposal ensures the Resources Safety Acts include contemporary provisions and references aligning with the establishment of RSHQ and achieve relative consistency amongst these Acts. Details about the proposed amendments are provided at Attachment 5.</p>

Impacts and benefits

- The proposed amendments to the Resources Safety Acts and consequential amendments to the CMSHR and MQSHR as outlined above will ensure the issues identified are appropriately addressed and facilitate streamlined requirements to provide overall efficiencies for the regulator and the regulated.
- The proposed streamlined and consolidated reportable disease notification requirements will also provide the regulator with a more holistic view of disease occurrences across the wider mining industry and across the breadth of workers' mining and quarrying careers.
- The RSHQ Act consequential amendments confirm the intent of the RSHQ Act in establishing RSHQ as Queensland's independent safety and health regulator as a separate entity from the department responsible for administering general resources legislation (e.g., resources tenures) and ensures applicable referencing and process errors are addressed, reducing the unnecessary confusion and ambiguity caused by these previous omissions and resulting administrative workarounds. The RSHQ Act consequential amendments do not impose adverse impacts on stakeholders.
- When viewed as a whole, these proposed minor amendments provide for improved regulatory guidance; improved information sharing with other government safety and health regulators; and provides some reduction in regulatory burden for industry and for operational improvements and efficiencies for the regulator, which in turn also has benefits industry and community safety relating to explosives matters.
- There are no direct adverse consequences expected from these proposals.

Consultation questions

HAVE YOUR SAY

QUESTION 20: Do you see any issues with the proposed streamlining of prescribed disease notification requirements? If so, what are they?

QUESTION 21: Are there any other circumstances where notification of a prescribed disease occurrence by an SSE may not be needed? If yes, please provide details.

QUESTION 22: Do you think there are any alternative mechanisms (i.e., not reliant on SSEs notifying of prescribed disease occurrences) that would still ensure the regulator and other stakeholders (including industry safety and health representatives and district workers' representatives) are kept appropriately informed of disease occurrences in the mining industry? If yes, please provide details.

QUESTION 23: Do you agree with updating the lists of prescribed reportable diseases in the CMSHR and MQSHR and also to make them consistent across the two regulations? Why or why not?

Have your say using the submission template

Attachment 5 – Details for RSHQ Act consequential amendments

CMSHA amendments

- Section 129 – redraft to align with section 126 of the MQSHA (i.e., omit subsection (b)) because it is no longer relevant in the RSHQ context as the commissioner no longer has a role in initiating a prosecution under the CMSHA.
- Sections 295 and 296(2) – change ‘chief executive’ references to ‘CEO’.
- Schedule 3, definition of *region* – change ‘chief executive’ reference to ‘CEO’.

Explosives Act amendments

- Section 62B – contains references to ‘chief executive’ and ‘department’. Reword section 62B to change ‘chief executive’ references to ‘CEO’ and to replace ‘public service employees employed in the department’ to ‘RSHQ’. Refer section 205 of the CMSHA and section 202 of the MQSHA for guidance.
- Section 80A(1)(g) – change ‘the department’ reference to ‘RSHQ’.
- Section 122(1)(b) – change ‘the department’s’ reference to ‘RSHQ’s’.
- Section 126D(3)(b) – change ‘the department’s website’ reference to ‘a Queensland government website’ and insert a new subsection containing the definition for ‘Queensland government website’ similar to that under the CMSHA, section 72(4) and the MQSHA, section 63(4).
- Schedule 2, definition of *appropriately qualified*, example of standing – change ‘the department’ reference to ‘the employing office’. Additionally, insert a new definition for ‘employing office’ that links to the meaning given under the RSHQ Act (i.e., see section 29(1) of the RSHQ Act).

MQSHA amendments

- Schedule 2, definition of *region* – change ‘chief executive’ reference to ‘CEO’.

PG Act amendments

- Section 817(2)(b) – after ‘an inspector’ insert ‘or authorised officer (safety and health)’. This will ensure the chief inspector is empowered to review an original decision by an authorised officer (safety and health), which currently [incorrectly] defaults to the chief executive of DoR because of current paragraph (d). This change was missed in relation to the establishment of RSHQ and subsequently when amendments to provide for the two types of ‘authorised officers’ (i.e., ‘safety and health’ and ‘general’) were made to delineate

between those authorised officers appointed for RSHQ versus those appointed for DoR.

- While the CEO is the RSHQ equivalent to a department's chief executive, this change refers to the chief inspector as the reviewer for an original decision by an authorised officer (safety and health). This change still effectively retains the status quo because there is no DoR equivalent to the chief inspector and the chief inspector is the more appropriate reviewer for a decision by an authorised officer (safety and health).
- Section 817(2) – insert a new paragraph (c) and renumber existing paragraphs (c) and (d) to (d) and (e). New paragraph (c) should deal with an original decision by the chief inspector, which should be reviewed by the CEO, but currently [incorrectly] defaults to the chief executive because of current paragraph (d). Suggested new paragraph (c) wording is as follows:

(c) if the original decision to which the application relates was made by the chief inspector—the CEO; or

This change effectively retains the status quo as the CEO is the RSHQ equivalent to a department's chief executive.

- Section 840A(1) – after 'the department's' insert 'or RSHQ's'. This will ensure that costs can also be awarded in relation to RSHQ's costs in relation to a prosecution, as was the case when Resources Safety and Health division was part of the then department (i.e., maintains the status quo).
- Meaning of 'relevant person' under sections 842(5), 843(7) and 844(5), paragraph (a)(i) – amend to also include a reference to an application made under section 731AB. Refer to Table 24 for background information.

Table 24 - Background information for proposed 'relevant person' amendments

Sections 842(5), 843(7) and 844(5) of the PG Act provide the following:

relevant person, for an application (or an application under this Act), means—
In this section—

relevant person, for an application (or an application under this Act), means—

- (a) the chief inspector, if the application is made under—
 - (i) section 622 or 728; or
 - (ii) chapter 9, part 1; or
- (b) otherwise—the chief executive.

These meanings do not consider an application to the chief inspector for a GDAA for a gas device made under section 731AB of the PG Act. A GDAA allows the holder to approve gas devices for supply, installation or use in Queensland (e.g., approval of a make and model of a domestic gas BBQ so it can be legally sold in Queensland, etc.).

Section 731AB was inserted into the PG Act by section 286 of the *Land, Explosives and Other Legislation Amendment Act 2019* (LEOLA Act) on 18 September 2020. While this post-dates the 1 July 2020 commencement of the RSHQ Act, the RSHQ Act should have included the

necessary consequential amendments to the PG Act (as outlined below) to commence immediately after the commencement of the section 286 of the LEOLA Act.

Currently, the meaning of 'relevant person' under sections 842(5), 843(7) and 844(5) of the PG Act in relation to an application to the chief inspector for a GDAA made under section 731AB of the PG Act default to the chief executive of DoR. This is not correct and not workable as section 731AB is not administered by DoR.

- Section 843(1)(b) and (c) – after 'the department' insert 'or RSHQ'. This will ensure that requests for further information (including a report, statement, etc.) relating to an application for a gas work licence, gas work authorisation or GDAA, as administered by the chief inspector, can direct the requested information, etc. be provided directly to another stated officer of RSHQ (e.g., a PG licencing officer).
- Section 848(3) – change so the paragraph only applies to the chief executive recording changes under subsection (1) to details relating to a *petroleum authority*⁶⁸ and not all authorities, as this [incorrectly] includes the *gas work licence*, *gas work authorisation* and *gas device approval authority* types which are administered by the chief inspector (including keeping of a register as required under s.734AB of the PG Act) and not the chief executive of the department. Additionally, insert a new subsection after subsection (3) as follows (or wording to that effect):

(3A) The chief inspector must record in the register the details of an amendment made to a gas work licence, gas work authorisation or GDAA under subsection (1).
- Section 856(1)(c) – after 'the department' insert 'or RSHQ'. This will ensure a contractor engaged by RSHQ to carry out activities for the administration of the PG Act for RSHQ is also captured by the meaning of *designated person* and provided appropriate protection from liability under the PG Act. An example is an external auditor engaged to audit safety and health fee liability and/or whether liable persons have paid the correct fee amounts, etc.
- Section 858 – Include a new subsection after subsection (1) to provide that the CEO may approve forms for use under Chapter 12 (Reviews and appeals). This relates to an 'approved form' required under section 818(b)(i) of the PG Act for making an application for the internal review of a decision. A further amendment is required to subsection (2) to change the 'chapters 7 to 10' reference to 'chapters 7 to 10 and chapter 12' so the chief inspector can also approve the internal review form mentioned under section 818(b)(i) of the PG Act.⁶⁹

⁶⁸ Refer meaning of petroleum authority given in section 19(1)(j) of the PG Act.

⁶⁹ Note that a related amendment to section 858 is also proposed as part of 'Other minor amendments' (refer Attachment 4) to allow the CEO to also approve forms under the PG Act relating to safety and health fees, including late payment fees, payable under the PG Act (refer PG Reg, Chapter 9).