



Resources Safety & Health
Queensland

Resources Safety & Health Queensland

Regulator performance report

2021-2022

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Introduction

Resources Safety and Health Queensland (RSHQ) is an independent statutory body responsible for regulating worker safety and health in Queensland's resources industries. RSHQ administers the:

- *Coal Mining Safety and Health Act 1999*
- *Explosives Act 1999*
- *Mining and Quarrying Safety and Health Act 1999*
- *Petroleum and Gas (Production and Safety) Act 2004*.

RSHQ's vision is *zero serious harm* across the state's resources sector. Serious harm includes a fatality, an injury requiring hospital admission, and an occupational disease such as mine dust lung disease. Taking a risk-based regulatory approach to protecting workers from harm, RSHQ regulates, educates, and assists industry to meet its obligations to protect and promote the safety and health of persons from risks associated with mining, quarrying, explosives and petroleum and gas. Refer to RSHQ's 2021-2022 Annual Report (<https://www.rshq.qld.gov.au/about-us/resources/publications/annual-report>) for more information about how we do this.

Regulator performance framework

The Queensland Government's Regulator Performance Framework¹ identifies model practices that seek to minimise regulatory burden and provide opportunities to reduce unnecessary compliance costs on regulated parties. As a Queensland Government regulator, RSHQ must publicly report annually on regulatory performance, including demonstrating the extent to which it is translating the model practices into business practices and outlining plans for future improvement.

¹ *The Queensland Government Guide to Better Regulation*, Queensland Treasury, May 2019, p. 27.

Regulatory practices aligned with model practices

The following tables outline the five model practices and their supporting principles. For each model practice, information is provided to demonstrate alignment of RSHQ's regulatory practices in 2021-2022², including improvement actions during this period.

1. Ensure regulatory activity is proportionate to risk and minimises unnecessary burden	RSHQ's regulatory practices and actions	
<ul style="list-style-type: none"> A proportionate approach is applied to compliance activities, engagement, and regulatory enforcement actions. Regulators do not unnecessarily impose on regulated entities. Regulatory approaches are updated and informed by intelligence gathering so that effort is focused towards risk. 	<ul style="list-style-type: none"> The <i>RSHQ Compliance and Enforcement Policy</i> (released March 2021) underpins our compliance and enforcement actions conducted in 2021-2022. The diagram (right) depicts how our officers identify a regulatory response that is systems-focused, proportionate, and effective. By balancing the factors outlined in the diagram, we take appropriate and proportionate compliance action, utilising one or a combination of education, corrective, deterrent, and punitive characteristics. 	<p>The diagram illustrates four factors on a scale from LOW to HIGH, with corresponding regulatory responses below:</p> <ul style="list-style-type: none"> RISK: The likelihood of harm occurring, and the impact of that harm on workers, industry, the community and the State. Scale: LOW to HIGH. RECURRENCE: The degree to which the risk arises as a consequence of a systemic or repeated compliance failure. Scale: LOW to HIGH. ENGAGEMENT: The degree to which the non-compliant entity is engaged with regulation. Scale: HIGH to LOW. COMMITMENT: The degree to which the non-compliant entity has equipped and informed itself to be able to comply. Scale: HIGH to LOW. <p>REGULATORY RESPONSE</p> <p>The nature of compliance action will depend on the relative weight of these factors, assessed on a case-by-case basis.</p> <p>EDUCATIONAL CORRECTIVE DETERRENT PUNITIVE</p>

² 2020-2021 refers to the reporting year 1 July 2021 to 30 June 2022.

<p>1. Ensure regulatory activity is proportionate to risk and minimises unnecessary burden</p>	<p>RSHQ’s regulatory practices and actions</p>
	<ul style="list-style-type: none"> • In 2021-2022, RSHQ developed a Regulator Effectiveness Framework as a tool for assessing our effectiveness as a regulator and against our strategic objective of becoming an exemplar regulator. The framework will assist RSHQ to identify a program of continuous improvement projects to ensure it strives towards being a best-practice regulator and supporting its vision of <i>zero serious harm</i> in the resources industry. In 2022-2023, the framework will be piloted in one to two best practice capability areas. <p><i>Future Improvements</i></p> <p>Our regulatory approach is informed by data analysis and industry risk profiling on known risks and previously unknown or poorly defined risks (e.g., emerging occupational health issues). We use this analysis to improve regulatory guidance and the legislative framework. For example:</p> <ul style="list-style-type: none"> • Ensuring RSHQ’s capability to regulate psychosocial hazards in the resources industry, including sexual assault and sexual harassment. • Ensuring regulation of the emerging hydrogen fuel cell industry is clear, risk-based and promotes safety and health outcomes for workers. • Respiratory health surveillance will become mandatory from 1 September 2022 for mineral mine and quarry workers, with inspections to review effectiveness of implementation planned for 2022-2023. • Following a safety inspection campaign regarding serious harm incidents in commercial kitchens, which identified a root cause of unlicensed gas work, an informational campaign with ‘<i>NO DIY gas work</i>’ messaging is being developed for release in 2023. • Significant work was completed in progressing regulatory amendments to better protect workers in line with the recommendations from the Board of Inquiry into Queensland Coal Mine safety, with a view to developing draft legislation, following completion of a Regulatory Impact Statement consultation process in 2022-2023.

2. Consult and engage meaningfully with stakeholders	RSHQ's regulatory practices and actions
<ul style="list-style-type: none"> Formal and informal consultation and engagement mechanisms are in place to allow for the full range of stakeholder input and Government decision making circumstances. Engagement is undertaken in ways that help regulators develop a genuine understanding of the operating environment of regulated entities. Cooperative and collaborative relationships are established with stakeholders, including other regulators, to promote trust and improve the efficiency and effectiveness of the regulatory framework. 	<ul style="list-style-type: none"> RSHQ carries out extensive consultation and engagement with stakeholders and industry groups across all resource sectors. This includes a focus on ensuring stakeholders are appropriately involved in the development of policy, legislation, or initiatives, and are aware of the outcomes from regulatory compliance activities. RSHQ regularly presents or attends key forums and conferences, taking a leading role in safety and health technological or industry advancements in the resources sector. For a comprehensive summary of consultation and engagement activities and events during the 2021-22 financial year, refer to RSHQ's Annual Report (2021-2022)³ which can be located on RSHQ's website (https://www.rshq.qld.gov.au/about-us/resources/publications/annual-report). <p><i>Notable stakeholder engagement activities</i></p> <ul style="list-style-type: none"> A draft code of practice for the emerging hydrogen fuel cell industry was developed. The draft code provides a consolidated compliance framework for existing hydrogen applications and projects. Consultation with stakeholders resulted in 23 submissions on the draft code. Once finalised, the code will be the first of its kind established in Australia and is being shared with other regulators to support consistency of approach. The Safegas V5 discovery phase was completed by RSHQ's Safety in Mines Testing and Research Station (Simtars) for a real time gas monitoring system used in underground coal mines. An industry survey and subsequent stakeholder workshop was conducted with 22 external stakeholders. The project will move to development in 2022-2023, with enhancements including automatic gas trending updates, flexible and integrated alarming, predictive trending, and improved data availability and reporting. The Simtars Research Advisory Committee (SRAC) held its first meeting in November 2021. The committee, comprising representatives from industry, academia, and the regulator, meets three times annually. The role of the SRAC is to provide direction and governance for Simtars led research.

³ Refer to 'Fast Figures' section, pages 24-27 of the RSHQ Annual Report 2021-22.

3. Provide appropriate information and support to assist compliance	RSHQ's regulatory practices and actions
<ul style="list-style-type: none"> • Clear and timely guidance and support is accessible to stakeholders and tailored to meet the needs of the target audience. • Advice is consistent and, where appropriate, decisions are communicated in a manner that clearly articulates what is required to achieve compliance. • Where appropriate, regulatory approaches are tailored to ensure compliance activities do not disproportionately burden particular stakeholders (e.g., small business) or require specialist advice. 	<ul style="list-style-type: none"> • In 2021-2022, RSHQ continued to provide a mandatory training and information program for doctors approved to provide statutory medical assessments for workers. • Census data is collected from operators and used to determine the fees payable to fund safety and health activities. Amendments to legislation commenced in 2021 removing the requirement for submitting an annual census of worker numbers for smaller scale operators – including mining claim holders and some categories of explosives licence holders – thereby reducing the regulatory burden on small business. • Queensland's resources industries span a broad stakeholder base and include workers in many remote and regional locations. Initiatives assisting greater accessibility during 2021-2022 include: <ul style="list-style-type: none"> ○ Partnering with the Queensland Government and Heart of Australia to deliver health assessments to remote and regional Queensland coal, mineral mine, and quarry workers, with the launch of the first-of-its-kind mobile health unit "Heart 5" in February 2022. Heart 5 supports the early detection of mine dust lung disease through screening tools including chest X-rays, spirometry, high-resolution computed tomography, and complex lung function testing. ○ The Mine Dust Health Support Service – a collaboration between the Office of Industrial Relations, WorkCover Queensland and RSHQ – helped a further 211 individuals access lung screening, compensation, and information. ○ Improvements to ResHealth – a digital occupational health surveillance system that allows coal mine workers, doctors, and employers to complete health assessments and access medical records in a real time, online platform. Improved access to digital records will enhance industry health surveillance and research to detect concerning trends. ○ Simtars launched its first on-demand online training for mandatory refresher training in its accredited respirable dust course, increasing accessibility and uptake. • RSHQ delivered its ongoing program of communication and engagement, including publications to inform and advise regulated entities about improving safety and health outcomes. In 2021-22, these included: <ul style="list-style-type: none"> ○ Fifteen periodicals detailing incidents that occurred at Queensland coal mines and mineral mines and quarries, recommending implementation of controls by sites with similar hazards. Three periodicals were issued for petroleum and gas and 12 for explosives industries. These are available for use by sites

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	<p>to share learnings with workers at toolbox talks, return to work sessions and other safety forums.</p> <ul style="list-style-type: none"> ○ Thirty safety alerts and 11 safety bulletins were issued outlining learnings from accidents, investigations, and incidents. ○ Guidance notes developed by the Coal Mines Inspectorate with input from industry on managing exposure to heat in surface coal mines and surface areas of underground coal mines, and the use of autonomous mobile machinery and vehicle introduction in coal mining. ○ A guideline was developed on ventilation control device hatch seals following the findings delivered by the coroner into the death of Mr Paul McGuire on 6 May 2014 at an underground coal mine. ○ A summary report produced by the Mineral Mines and Quarries (MMQ) Inspectorate following the fatality of Mr Connor-Shaye Campbell Milne at Fairfield Quarry in 2018. The report provides an understanding of the events that caused Mr Milne's death and the actions industry need to take to prevent recurrence. ○ A report by the MMQ Inspectorate on "Improving high potential incident reporting and investigation quality" was released to industry and discussed by our inspectors at sites. ○ Regulator forums were held with ventilation officers, mine mechanical managers, electrical engineering managers, Board of Examiner applicants, site senior executives, health and safety managers, and open cut examiners. One objective of these forums is to facilitate industry learning from incidents. <ul style="list-style-type: none"> ● We provided a service for the safe collection and disposal of explosives containing materials, which resulted in the safe and secure removal of hundreds of tonnes of items with potential to cause serious harm. <p><i>Future Improvements</i></p> <ul style="list-style-type: none"> ● Implementation of a regulator critical risk control program to better support industry understanding and implementation of critical risk controls in coal operations to improve safety and health outcomes. Improved identification and documentation of critical controls, across industry, supported by information sharing and performance standards by RSHQ, will improve existing principal hazard management plans. ● Development of a continuing professional development course in 'learning from disasters' for statutory certificate of competency holders, to build knowledge and promote awareness of catastrophic risk. ● Implementation of the practicing certificate scheme by the Board of Examiners to validate continuous

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	<p>professional development of statutory certificate of competency and notice holders in the industry.</p> <ul style="list-style-type: none"> • The review and development of six recognised standards for the coal industry in the areas of spontaneous combustion, training, risk management, electrical installations, tyre and rim management, and the use of polymeric chemicals. • Publication of a best practice guideline to prevent misfires of explosives, developed with industry.

4. Commit to continuous improvement	RSHQ's regulatory practices and actions
<ul style="list-style-type: none"> • Regular review of the approach to regulatory activities, collaboration with stakeholders and other regulators to ensure it is appropriately risk based, leverages technological innovation and remains the best approach to achieving policy outcomes. • To the extent possible, reform of regulatory activities is prioritised on the basis of impact on stakeholders and the community. • Staff have the necessary training and support to effectively, efficiently and 	<p>RSHQ is committed to continuous improvement – one of its core values.⁴ Initiatives commenced or undertaken in 2021-2022 include:</p> <ul style="list-style-type: none"> • Continuing the <i>Facilitating High Reliability Organisation behaviours in Queensland's Resources Sector and Modernising Regulatory Enforcement</i> project, with the primary objective to progress legislative proposals that modernise regulatory enforcement and strengthen the safety and health culture of the resources sector. Proposed reforms support the adoption of high reliability organisational behaviours in the resources sector and aim to reduce serious accidents and fatalities, modernise enforcement powers and contemporise the legislation. • Continuing to progress amendment regulations on behalf of the government which strengthen safety and health protections for resources workers, including launching a continuing professional development scheme for certificates of competency and site senior executive notices; providing for the installation and maintenance of active explosion barriers in underground coal mines; introducing a more equitable tiered fee structure for biogas-run equipment for biogas and biomethane operations (commencing 1 July 2022); improvements for safety by requiring that biogas flares meet best practice standards; implementing a nationally consistent framework for the regulation of small, gas engine driven appliances; and extending transitional arrangements

⁴ RSHQ's core values are outlined on page 10 of RSHQ's Annual Report 2021-2022 (<https://www.rshq.qld.gov.au/about-us/resources/publications/annual-report>).

4. Commit to continuous improvement	RSHQ's regulatory practices and actions
<p>consistently perform their duties.</p>	<p>for direct employment requirements of statutory roles for coal mining operations, allowing industry stakeholders to identify and address implementation challenges.</p> <ul style="list-style-type: none"> • Adapting our work practices where appropriate, including: <ul style="list-style-type: none"> ○ Paperless gas compliance certificates for gasfitters; launched in March 2022 to verify safety compliance via portable electronic devices. ○ Enhancements to the ResHealth digital system to support doctors, workers, and employers in completing online health assessments. Support is available for stakeholders as they transition to ResHealth for all health assessments commencing after 31 March 2023. • The Enterprise Project Management Office (EPMO) was established to steward RSHQs multi-year, transformational programs of work spanning data, digital and organisational change. One of the key units of the EPMO is the Central Assessment and Performance Unit (CAPU), which was formed following the findings of the recommendations from the review of all fatal accidents in Queensland mines and quarries from 2000 to 2019 – a report issued by Dr Sean Brady in December 2019⁵. Key functions of the CAPU include: <ul style="list-style-type: none"> ○ Receive, triage, and manage incidents reported by industry ○ Be a single point of incident reporting contact for industry ○ Provide key insights and data analysis in relation to industry safety trends and performance ○ Engage, communicate with, and monitor respective industries to improve the reporting of high potential incidents, quality of investigations undertaken, and effectiveness of controls implemented. <p><i>Future Improvements</i></p> <ul style="list-style-type: none"> • RSHQ will establish a specialised investigation unit for serious incidents in the resources sector. The Serious Incident Investigation Unit will provide high quality, best practice investigations to inform industry and identify matters suitable for consideration by the Office of the Work Health and Safety Prosecutor. • Extensive work is being undertaken by the EPMO to establish a new incident management methodology and

⁵ Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019, Dr Sean Brady, December 2019.

4. Commit to continuous improvement	RSHQ's regulatory practices and actions
	<p>complimentary digital solution, which will introduce best practice triaging and analysis of incidents. The system will also provide an improved user experience and enhance the accuracy of information, shorten response timeframes, and increase industry follow-up. This work is being undertaken in conjunction with the CAPU and supports RSHQ's strategic objective of being a data driven risk-based regulator.</p> <ul style="list-style-type: none"> • Simtars is in the final stages of building and commissioning a respirable dust chamber in collaboration with the National Institute of Occupational Safety and Health in the USA. Based on the 'Marple' design, the respirable dust chamber will establish a facility in Australia for respirable dust measurement equivalent to those available in the USA and UK. Commissioning, testing and development of the chamber is scheduled for 2022-2023

5. Be transparent and accountable in actions	RSHQ's regulatory practices and actions
<ul style="list-style-type: none"> • Where appropriate, regulatory frameworks and timeframes for making regulatory decisions are published to provide certainty to stakeholders • Decisions are provided in a timely manner, clearly articulating expectations and the underlying reasons for decisions • Indicators of regulator performance are publicly available 	<ul style="list-style-type: none"> • RSHQ's Annual Report 2021-2022 has been published on the RSHQ website summarising performance indicator results and activities conducted by inspectorates and divisions, including inspections, audits, compliance directives, and complaints received from workers. The Annual report was provided to key industry stakeholder groups. See (https://www.rshq.qld.gov.au/about-us/resources/publications/annual-report). • Planned and actual inspection and audit numbers are published quarterly on the RSHQ website allowing industry to see this performance measure. See (https://www.rshq.qld.gov.au/about-us/resources/publications/compliance-data). • RSHQ provides a service commitment (including targets for decision timeframes) to stakeholders on licence and permit applications. We are flexible; accommodating urgent requests based on industry and stakeholder needs.