

# Mining Safety and Health Advisory Committee

Annual report 2018–19



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## FROM THE CHAIR

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For almost 20 years, the Mining Safety and Health Advisory Committee has played an important role in protecting the safety and health of mine and quarry workers. In 2018–19, advisory committee members have provided professional and informed advice to the Minister for Natural Resources, Mines and Energy on a range of ongoing and emergent issues and I would like to thank each member for their contribution.

This year, there have tragically been two quarry industry deaths. In addition, there have been a number of serious accidents in mineral mines and quarries which have led to permanent and long-term injuries for workers. On behalf of all advisory committee members, I would like to express my deepest condolences and sympathies to the families, friends and colleagues of these men, and to all others affected by these and other workplace tragedies.

These types of incidents serve to remind the advisory committee of its over-riding mission to ensure that every worker is able to arrive home from work in the same condition, both physically and mentally, in which they started the day. In pursuit of this goal, I can advise that the advisory committee met eight times in 2018–19. Given that the advisory committee has a requirement to meet twice per year, I commend the members' dedication to improving safety and health outcomes for mine and quarry workers.

This dedication and commitment to improving safety and health has seen many advances in the monitoring and management of mining and quarrying safety and health and a refinement of the competencies qualifying people to undertake roles and perform certain tasks in mineral mines and quarries.

A recent example of the major contribution the advisory committee has made has been its cooperation with the Department of Natural Resources, Mines and Energy on the development of the *Guideline for management of respirable crystalline silica in mineral mines and quarries*. That guideline is currently being reviewed by the advisory committee to ensure it covers all areas of the industry and is effective and up-to-date. The advisory committee has also made a number of significant contributions to the respirable crystalline silica-related programs that are now in place across the industry. This has been a personally rewarding experience for myself and the members of the advisory committee and the

members should feel proud of the major contribution they have made.

Over the last 18 months, the advisory committee has also embarked on a major program of work to review the effectiveness of the current mine safety and health legislative framework. This has been a difficult task as this program of work has not been attempted before and there are no simple benchmarks for what constitutes effective mining and quarrying safety and health legislation. Regardless of this difficulty, the advisory committee members have approached the task in a way that illustrates the level of expertise, dedication and experience they hold.

As a result of their efforts, the advisory committee recently provided the Minister with a prioritised list of amendments that would, in their opinion, improve the effectiveness of the legislation. This list resulted from careful analysis and consideration of the results of investigations, coronial and warden inquires, inspections, directives, substandard condition and practice notices and mine record entries, as well as discussions with mine inspectors and key representatives of mine and quarry workers and operators.

This effectiveness review will continue in 2019–20. In this regard the Minister, in response to the recent spate of fatalities in both quarrying and coal mining, extended elements of the effectiveness review project being conducted by the Coal Mining Safety and Health Advisory Committee to the Mining Safety and Health Advisory Committee. As a result, I extended an existing contract in June 2019 on the advisory committee's behalf to conduct an expert legal assessment of the suite of mining and quarrying safety and health legislation.

Advisory committee members have also provided the Minister with their own expert advice on a range of proposed legislative changes around issues such as industrial manslaughter, dispute resolution, protections from reprisals for reporting safety concerns, requirements for underground mines to employ qualified ventilation officers, statutory notification of mine dust lung diseases, and structural reforms for the resources safety and health regulatory body.

In 2018–19, the advisory committee developed and endorsed a new guideline to manage the storage and packaging of chemicals under the *Globally harmonised system of*

*classification and labelling of chemicals.* The *Guideline for hazardous chemicals* (QGLo3) brings the management, packaging and labelling of chemicals in mines and quarries into line with other industries around the world.

A guidance note for the management of tyres, wheels and rims was also considered and endorsed. *QGN31 Tyre, wheel and rim management* was developed as a result of the recommendations from the Coroners Court of Queensland relating to multiple deaths resulting from separate tyre, wheel and rim incidents.

The advisory committee has also provided advice to the Minister on a range of issues related to management of mine dust lung disease. This has included;

- the development and monitoring of a hazard database
- extending proposed initiatives to address the recommendations of the Monash University Centre for Occupational and Environmental Health review to mines and quarries
- the management and monitoring of respirable crystalline silica
- Safe Work Australia’s review of workplace exposure levels of airborne contaminants.

The advisory committee has also continued to develop and maintain the competencies which qualify a person to perform the duties of a statutory position under the *Mining and Quarrying Safety and Health Act 1999*. In 2018–19, the competency for ventilation officers was reviewed and a new competency was published. A supervisor competency continues to be reviewed and competencies for underground mines are currently being developed in consultation with industry, unions and Simtars. These competencies ensure Queensland maintains a workforce with the necessary technical knowledge and qualifications to support a healthy and safe workforce in a rapidly changing industry.

I would like to thank all of the members of the advisory committee for their hard work and dedication to mineral mining and quarrying safety and health and their tireless efforts to provide expert advice to the Minister. I look forward to working with the advisory committee in 2019–20 and continuing the work of ensuring every miner comes home safe and healthy every day.



**Kate du Preez**  
**Commissioner for Mine Safety and Health**



## BACKGROUND

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The Mining Safety and Health Advisory Committee is required to be established under part 6 of the *Mining and Quarrying Safety and Health Act 1999*. Its establishment replaced the Mining Safety and Health Advisory Council that had been in place since the legislation commenced in 2001.

The advisory committee is a tripartite body formed to provide advice to the Minister on mining and quarrying safety and health. The advisory committee is an integral part of the governance arrangements that are in place to manage safety

and health in the industry and to ensure mine and quarry workers arrive home safe and healthy every day.

Under the *Mining and Quarrying Safety and Health Act 1999*, the chair of the advisory committee must prepare an annual report on the committee's operations for the year. The report must be given to the Minister for Natural Resources, Mines and Energy as soon as practicable, but within four months, after the end of each financial year. The Minister must table the report in the Legislative Assembly within 14 sitting days.

## ROLE OF THE ADVISORY COMMITTEE

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The primary function of the advisory committee is to give advice and make recommendations to the Minister about promoting and protecting the safety and health of persons at mines and quarries.

The advisory committee must discharge its function by periodically reviewing the effectiveness of the:

- Act, Regulation and guidelines
- control of risk to any person from mining and quarrying operations.

In periodically reviewing effectiveness, the advisory committee must have regard to:

- the risk management performance of the mining industry
- the appropriateness of guidelines
- education, training and standards of competency within the mining and quarrying industry

- the implementation of recommendations from inspectors' investigations, coroners' inquests, boards of inquiry and other sources
- the promotion of community knowledge and awareness of safety and health in the mining and quarrying industry
- any other matter referred to it by the Minister.

The advisory committee also has the function of establishing, recognising and publishing the competencies accepted by it as qualifying a person to perform the stated tasks, and the safety and health competencies required to perform the duties, of a person under the Act.

## MEMBERSHIP

The advisory committee consists of nine members representing the Queensland Government, mine and quarry workers and mine and quarry operators, and an independent chair. Members are nominated to, and appointed by, the Minister. The chair of the advisory committee is the Commissioner for Mine Safety and Health, Mrs Kate du Preez. Members are appointed for terms of up to three years and there is no limit to the number of terms members can serve.

The advisory committee includes members from the Australian Workers Union (AWU) Australian Manufacturing Workers' Union (AMWU), district workers' representatives (DWR), Queensland Resources Council (QRC) and Department of Natural Resources, Mines and Energy (DNRME).

**Table 1:** Mining Safety and Health Advisory Committee members for 2018–19

NAME	MEMBERSHIP	ORGANISATION	NUMBER OF MEETINGS
Kate du Preez	Commissioner for Mine Safety and Health	Independent chair	8
Stephen Carson	Workers' representative	DWR	6
Julie Devine	Queensland Government representative	DNRME	7
Grant Egginton	Operators' representative	QRC	6
John Hempseed <sup>1</sup>	Workers' representative	AMWU	0
Gavin Lawrence	Workers' representative	AWU	8
Katie Ormonde <sup>2</sup>	Queensland Government representative	DNRME	0
Luca Rocchi	Queensland Government representative	DNRME	6
Russel Wilson	Operators' representative	CCAA	8
Maryann Wipaki	Operators' representative	QRC	7

### Substitute members

Two substitute members have also been appointed to stand in when members are not available. Substitutes may also attend meetings as observers.

**Table 2:** Mining Safety and Health Advisory Committee substitute members for 2018–19

NAME	MEMBERSHIP	ORGANISATION	NUMBER OF MEETINGS
Simon Delander	Operators' representative	QRC	5
Peter Ambrose	Operators' representative	CCAA	0

## MEETINGS HELD

Under the *Mining and Quarrying Safety and Health Act 1999*, the advisory committee has an obligation to meet at least twice a year. In 2018–19, the advisory committee held eight meetings. Four of the eight meetings were scheduled meetings and three were extraordinary meetings held to discuss emerging issues at the Minister’s request. The eighth meeting was a strategic planning meeting to prioritise safety and health risks and begin planning for the next three years. The meeting held on 23 January 2019 was a non-quorum meeting.

**Table 3:** Mining Safety and Health Advisory Committee meetings in 2018–19

MEETING NUMBER	DATE	LOCATION
Board of Examiners nominations	17 July 2018	Teleconference extraordinary
59	18 September 2018	Townsville
Regulatory framework information paper	27 September 2018	Teleconference extraordinary
60	27 November 2018	Redbank
Industrial manslaughter and other legislative proposals discussion paper– no quorum	23 January 2019	Teleconference extraordinary
Strategic planning forum	12 March 2019	Brisbane
61	13 March 2019	Brisbane
62	5 June 2019	Townsville



# WORK OF THE ADVISORY COMMITTEE

The advisory committee achieves its primary function by:

- reviewing the effectiveness of the legislation (Act, Regulation and guidelines)
- reviewing the effectiveness of the control of risk to any person from mining operations
- recognising, establishing and publishing
  - the competencies qualifying a person to perform tasks prescribed under a Regulation
  - the safety and health competencies required to perform the duties of a person under the Act.

## Review the effectiveness of the legislation

In reviewing the effectiveness of the mining and quarrying safety and health legislation, the advisory committee examines the *Mining and Quarrying Safety and Health Act 1999*, the *Mining and Quarrying Safety and Health Regulation 2017* and the suite of guidelines published under the Regulation.

The advisory committee maintains a good working relationship with the Department of Natural Resources, Mines and Energy and will continue to identify amendments that it considers essential to the effectiveness of the suite of legislation, and to review new and amended legislation as it is drafted.

## Review of the Act, Regulation and guidelines

In 2016–17, the committee initiated a review of the full suite of mining and quarrying safety and health legislation in accordance with the requirements of the Act to periodically review the effectiveness of the legislation. A formal review of the effectiveness of the legislation had not been undertaken since the inception of the advisory committee.

The review, which is ongoing, aims to advise the Minister on the effectiveness of the Act, Regulation and guidelines, and the control of any risk to any person from mining and quarrying operations.

In 2018–19, the advisory committee undertook a review of fatality and high potential incident investigations, mine and quarry inspections, mine record entries, directives and substandard conditions or practices notices. It also discussed the effectiveness of the legislation with key stakeholders from industry and unions. From this review, the advisory committee identified a prioritised list of recommended legislative enhancements that, in their view, would improve the effectiveness of the Act and Regulation.

In addition, in response to the increased number of fatalities in 2018–19 in the coal mining and quarrying industries, the Minister instructed that an expert legal assessment of coal mining safety and health legislation being conducted by the Coal Mining Safety and Health Advisory Committee under its effectiveness review be extended to also cover mining and quarrying safety and health legislation. Accordingly, the Mining Safety and Health Advisory Committee commenced its own project to conduct an expert legal assessment of mining and quarrying legislation.

The legal assessment project aims to conduct a thorough desktop review of each element of the regulatory framework to identify aspects which seem unclear, confusing or open to multiple conflicting interpretations, either within the Act or the Regulation, or across the framework as a whole. This review will also consider if there are gaps in the framework, including definitions that should be, but are not presently, provided and will assess the current balance between the Act and Regulation.

The review of the Act, Regulation and guidelines and the expert legal assessment project will continue in 2019–20. The advisory committee will report on the outcomes of the expert legal assessment and any recommendations from that project to the Minister by the end of December 2019.

## Industrial manslaughter and other legislative amendments for resources safety and health

The advisory committee provided advice to the Minister and feedback to the department on whether a number of provisions in the *Work Health and Safety Act 2011* should be adopted for Queensland's resources safety and health legislation.

The proposed provisions related to:

- industrial manslaughter offences
- dispute resolution processes
- prohibitions on discriminatory, coercive and misleading conduct
- workplace entry by entry permit holders.

These measures were being considered for their potential to strengthen the current approaches under the resources safety and health Acts to discourage breaches of safety and health obligations, improve the effectiveness of the compliance and enforcement frameworks, and improve consistency with the *Work Health and Safety Act 2011*.

Key issues raised in the discussion paper related to the adequacy of:

- penalties under the resources safety and health Acts
- dispute resolution processes under the *Coal Mining Safety and Health Act 1999* and *Mining and Quarrying Safety and Health Act 1999*
- reprisal provisions in the resources safety and health Acts
- union representation of workers under the current frameworks in the *Coal Mining Safety and Health Act 1999* and *Mining and Quarrying Safety and Health Act 1999*
- proposals for inclusion of worker representation provisions in the *Petroleum and Gas (Production and Safety) Act 2004* and *Explosives Act 1999*.

In developing its advice and feedback, the advisory committee reviewed;

- general manslaughter provisions in Queensland and other jurisdictions
- industrial manslaughter provisions in the Australian Capital Territory
- work health and safety legislation in Queensland
- expert opinions in relation to these provisions; and sought expert advice.

The advisory committee also considered submissions and the government's response<sup>1</sup> to the Australian Senate inquiry, *They never came home—the framework surrounding the prevention, investigation and prosecution of industrial deaths in Australia*;<sup>2</sup> the Workplace Health and Safety Queensland *Best practice review of workplace health and safety Queensland*,<sup>3</sup> and the Queensland parliamentary inquiry into amendments to the Work Health and Safety Act.<sup>4</sup>

## Amendments to the *Mining and Quarrying Safety and Health Act 1999*

In 2018–19, the advisory committee analysed and provided advice to the Minister on a range of proposed amendments to the *Mining and Quarrying Safety and Health Act 1999* contained in the Mines Legislation (Resources Safety) Amendment Bill 2018.

The advisory committee discussed with the department the timing of the Bill and transitional provisions and how additional priority statutory amendments might be advanced if they were not in the Bill.

Proposed amendments to the legislation in the Bill included a requirement for an underground mine to appoint a suitably qualified ventilation officer, enhancements to continuing professional development, officer obligations and the notification of diseases. The Bill received assent on 9 November 2018.

## Proposed resources safety and health regulator and funding models

In June 2018, the Project Management Office, which was established by the Minister to advise him on how the Queensland Government might best achieve the intent of a number of the recommendations of the Coal Workers' Pneumoconiosis Select Committee, released its final report on options for the resources safety and health regulator and funding models.

1 [https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Education\\_and\\_Employment/IndustrialdeathsinAus/Government\\_Response](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Education_and_Employment/IndustrialdeathsinAus/Government_Response)

2 [https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Education\\_and\\_Employment/IndustrialdeathsinAus/Report](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Education_and_Employment/IndustrialdeathsinAus/Report)

3 [https://www.worksafe.qld.gov.au/\\_\\_data/assets/pdf\\_file/0016/143521/best-practice-review-of-whsq-final-report.pdf](https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0016/143521/best-practice-review-of-whsq-final-report.pdf)

4 [https://www.worksafe.qld.gov.au/\\_\\_data/assets/pdf\\_file/0016/143521/best-practice-review-of-whsq-final-report.pdf](https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0016/143521/best-practice-review-of-whsq-final-report.pdf)

The report outlined 14 key findings and contained 10 recommendations about the structural reform of the resources safety and health regulator and the funding model that should be applied. In particular, the recommended model had regard for stakeholder preferences, including those expressed by the advisory committee, in relation to:

- the importance of advisory functions provided by tripartite committee arrangements
- the desirability for an avenue for independent prosecutions
- the need for a dedicated investigative service
- the retention of a Commissioner role.

The Project Management Office suggested that additional consultation was key to ensuring that stakeholders have an opportunity to comment on the additional components in the proposed regulatory model.

As a result, in September 2018, the department issued a follow-up information paper *Regulatory framework for resources safety and health in Queensland—additional component recommended by the Project Management Office*. This information paper contained key recommendations about the formation of a stand-alone regulator, including:

- the creation of a tripartite resource safety and health advisory council supported by subcommittees
- the establishment of a dedicated investigations unit reporting to the chief executive of the regulator
- the establishment of an independent Commissioner for Resources Safety and Health
- use of the Work Health and Safety Prosecutor to prosecute serious offences under the suite of resources safety and health legislation.

The advisory committee reviewed and provided the Minister with advice on this paper in January 2019.

The Minister for Natural Resources, Mines and Energy introduced the Resources Safety and Health Queensland Bill 2019 into the Queensland Parliament on 4 September 2019 to establish Resources Safety and Health Queensland as a statutory body to regulate safety and health in the resources sector.

## Updates to guidelines and guidance notes

The committee worked closely with the department, directly on the development and/or updating of the following guidelines and guidance note.

### Guideline for hazardous chemicals (QGL03)

This guideline applies to substances, mixtures, and articles used, handled or stored at a mine or quarry and which are defined as hazardous chemicals under the *Mining and Quarrying Safety and Health Regulation 2017*.

The purpose of this guideline is to implement the *Globally harmonised system of classification and labelling of chemicals* by providing practical guidance to people involved in the manufacture, import, supply, use, handling or storage of hazardous chemicals on how to correctly label hazardous chemicals used, handled or stored at a mine or quarry.

In considering how to implement the system, the advisory committee considered three options:

- maintain the current system
- adopt a model regulation and codes of practice which extended to thousands of pages of legislation
- make minimal legislative change and develop supporting guidelines.

The preferred approach for the advisory committee was to make minimal legislative change and develop supporting guidelines.

The proposed guideline covered three areas:

- classification and labelling of hazardous chemicals
- safety data sheets of hazardous chemicals
- manifest quantities and placarding.

The Minister was advised that the advisory committee endorsed the guideline. In implementing the guideline, the advisory committee recommended an extensive training and communication package particularly targeting operators of small mines and quarries.

## **Guideline for management of respirable crystalline silica in Queensland mineral mines and quarries (QGL02)**

This guideline was developed to help mine and quarry site senior executives to identify the key operational areas of respirable dust generation, as well as assist with risk management of exposure to respirable dust. This also includes validation of the effectiveness of the controls and implementation of corrective actions if controls have been found to be ineffective.

In March 2019, the advisory committee assisted the department with a review of QGL02 to implement the recommendations from the Monash University Centre for Occupational and Environmental Health review<sup>5</sup> that are applicable to mineral mines and quarries.

Proposed changes included:

- expanding the scope of the guideline to respirable dust
- excluding lower risk operations such as opal, gemstone, alluvial gold and tourist mines
- clarifying the requirements for assessing and measuring risk
- enhancing and modifying the health surveillance standards to closely align with the Coal Mine Workers' Health Scheme
- updating the exposure limit for respirable crystalline silica based on any changes published by Safe Work Australia.

The advisory committee provided expert advice on how the proposed changes could best be applied to the mineral mining and quarrying industry—taking into account the operational diversity of the industry—and how the changes could be best communicated and implemented. The advisory committee and department are currently undertaking additional consultation with small-scale operators and, in particular, small quarries on the impacts of proposed changes and how best to proceed with enhancements.

## **Guidance note 31—Tyre, wheel and rim management (QGN31)**

The committee considered and endorsed a new guidance note for the management of tyres, wheels and rims at mineral mines and quarries. It applies to all tyres, wheels and rims on mobile, transportable and fixed plant used as part of operations at a mine. It does not apply to tyres, wheels and rims that have a proven low risk—such as those fitted to gas trolleys, wheelbarrows, parts trolleys, ride on lawnmowers, and earthmover equipment jacks

This guidance note aims to assist mineral mines and quarries in identifying hazards associated with tyres, wheels, and rims and effective controls to minimise the risk of injury and death from uncontrolled movements and pressure release events.

The guidance note was developed as a result of the recommendations from the Coroners Court of Queensland relating to multiple deaths resulting from separate tyre and/or rim incidents. The advisory committee elected to implement a guidance note instead of a guideline given the need for greater flexibility in the mining and quarrying sector than was necessary in coal mining in which a recognised standard (the coal mining equivalent of a guideline) was implemented.

## **Guidance note 03—Healthy atmosphere in underground mines (QGN03)**

The *Mines Legislation (Resources Safety) Amendment Act 2018* made changes to the *Mining and Quarrying Safety and Health Act 1999* which made it a statutory requirement for underground mineral mines to appoint a suitably qualified ventilation officer.

In light of this legislative change, the advisory committee refined the existing competency to ensure that underground mineral mines were able to meet their new statutory obligations.

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<sup>5</sup> Review of Respiratory Component of the Coal Workers' Health Scheme for the Queensland Department of Natural Resources and Mines – Final Report – 12 July 2016 – Monash Centre for Occupational and Environmental Health, Monash University

## Review the effectiveness of the control of risk to any person

In reviewing the effectiveness of the control of risk to any person from mining and quarrying operations, the committee provided independent advice to the Minister and department about:

- how implementing similar provisions to those in the Coal Mine Workers' Health Scheme resulting from the recommendations of the Monash University Centre for Occupational and Environmental Health review could enhance the health of workers in mineral mines and quarries
- the management of respirable crystalline silica in mineral mines and quarries
- Safe Work Australia's review of workplace exposure levels of airborne contaminants
- how to implement Safe Work Australia's blood lead level requirements in the Queensland mining industry
- the implementation of the *Globally harmonised system of classification and labelling of chemicals* scheme in mineral mines and quarries
- nominations for vacant positions on the Board of Examiners
- the management of fatigue in coal mines and mineral mines and quarries
- other mining and quarrying safety and health matters, including guidelines, guidance notes, safety alerts and bulletins, and other documentation.

## Consideration of Coal Mine Workers' Health Scheme improvements

In 2018–19, the department consulted with stakeholders to explore the development of a health surveillance program for mineral mine and quarry workers which would offer similar protections as those provided for coal mine workers. This consultation resulted in the identification of a number of potential features of a mineral mine and quarry workers' health scheme for further consultation and consideration including:

- a requirement to implement a health surveillance program where there is a risk to worker health due to respirable crystalline silica

- specific requirements for doctors performing health assessments
- establishment of approved training programs for medical providers—wherever possible using the programs already established for the Coal Mine Workers' Health Scheme for spirometry and B-readers
- use of a diagnostic pathway approved by the Queensland Chief Health Officer for diagnosis and treatment of mine lung dust disease.

This would result in improved health protection for workers, and provide for consistency across jurisdictions. However, the cost and site readiness needs to be considered as part of any implementation. As part of its consultation, the advisory committee noted that, unlike coal mines, many mineral mines and quarries have no respirable crystalline silica risk due to variable geological conditions and any program implemented would need to take this into account.

A number of improvements have already been applied to mineral mines and quarries through QGLO2 and the Mining and Quarrying Safety and Health Regulation 2017 including mandatory reporting for mine lung dust diseases, five-yearly chest x-rays and free lung health checks for retired and former mine workers. This project is continuing and the advisory committee is aiming to provide the Minister with further advice in 2019–20.

## Management of respirable crystalline silica

In 2018–19, the advisory committee began a quarterly examination of dust monitoring data from mineral mines and quarries. The advisory committee analyses trends in respirable crystalline silica exposures and exceedances of the occupational exposure limit and provides advice to the Minister on how workers can be better protected from exposure to respirable crystalline silica.

This regular monitoring of dust results has been facilitated by the expansion of the respirable dust database by the Department of Natural Resources, Mines and Energy to include dust results from mineral mines and quarries.

On 14 May 2019, members of the advisory committee visited the Sydney Metro project to review its approach to managing respirable crystalline silica. Members found that, while the Sydney Metro project's approach stood out as best practice in the work health and safety environment in New South Wales and had made significant strides in the management of respirable crystalline silica, the Queensland approach adopted under QGLO2 was comparable.

## Safe Work Australia

The advisory committee worked closely with Safe Work Australia on its review of workplace exposure standards for airborne contaminants and, in particular, of respirable crystalline silica.

The advisory committee provided feedback and advice on proposed changes to occupational exposure limits for respirable crystalline silica including providing advice in relation to sources of data. It also acted as a liaison between industry and Safe Work Australia.

Work on new occupational exposure limits for respirable crystalline silica and diesel particulates matter is continuing with new limits expected to be released in late 2019.

The advisory committee also considered how to implement Safe Work Australia's blood lead level requirements in the Queensland mining and quarrying industry. This work is ongoing and is informed by the advisory committee's February 2017 stakeholder blood lead workshop.

## Implementation of *Globally harmonised system of classification and labelling of chemicals*

The advisory committee worked with the department on the implementation of the *Globally harmonised system of classification and labelling of chemicals* in Queensland mineral mines and quarries. This resulted in the development and publishing of the *Guideline for hazardous chemicals (QGLo3)* in July 2019.

## Nominations for Board of Examiners

The Minister requested advice from the advisory committee regarding nominations for a vacant position on the Board of Examiners for mineral mines and quarries. On 17 July 2018, the advisory committee held a joint meeting with the Coal Mining Safety and Health Advisory Committee to assess the nominations for the position and advised the Minister on its recommended appointee.

## Fatigue management workshop

In 2018–19, the advisory committee examined the impacts of fatigue on the health and safety of mine and quarry workers and provided advice to the Minister on strategies that can be implemented to minimise the risk to workers.

On 18 July 2018, the advisory committee contributed to a workshop held by the Commissioner for Mine Safety and Health and the Occupational Health Mining Advisory Committee which examined the current fatigue management practices in the mining industry.

The workshop was attended by a range of mining industry stakeholders from both the coal and mineral mining and quarrying industries. It provided an opportunity to examine the causes of fatigue-related incidents and to further explore strategies that can be implemented to minimise the risk to workers.

Representatives from the Queensland Police Service, National Heavy Vehicle Regulator, and Crown Law presented to attendees and specialist fatigue expert Professor Naomi Rogers discussed the latest fatigue research.

Outcomes of the workshop included a recommendation that Resources Safety and Health revisit the current *Guidance note for fatigue risk management* and a call for greater sharing of information within the industry.

The advisory committee will continue to consider and provide advice to the Minister on fatigue management on an ongoing basis.

Safe Work Australia expects to have a draft occupational exposure level for consultation in October 2019.



## Establishing, recognising and publishing competencies

The advisory committee is responsible for recognising, establishing and publishing the competencies qualifying a person to perform the duties of a mining and quarrying statutory position under the Act.

The advisory committee maintains a list of approved competencies which is published on the Queensland Government's Business Queensland website. This list is periodically updated to ensure that people in mining and quarrying statutory positions have appropriate skills and knowledge to perform their duties.

In setting the competencies, the advisory committee consults broadly, including with tripartite stakeholders, other jurisdictions and training organisations.

In 2018–19, the committee implemented a new or updated competency for ventilation officers. It also worked on draft competencies for supervisors of underground mines and with Skills Australia to consider potential further changes to the competencies for supervisors.

## Ventilation officers

The *Mines Legislation (Resources Safety) Amendment Act 2018* enacted a requirement for underground mines to appoint a suitably qualified ventilation officer. The advisory committee considered the competencies that these critical positions would be required to hold and consulted with Simtars on suitable training requirements that are necessary to achieve competency in ventilating underground mines.

The advisory committee considered similar qualifications which are available in other jurisdictions and the proposed Queensland qualifications were mapped against other states' competencies, training requirements, and qualifications. The inspectorate analysed the needs of the industry in Queensland and consulted with key stakeholders including training providers. The proposed competency was also reviewed by underground mining stakeholders at the department's underground mine managers forum. Based on this consultation, the advisory committee determined that the competency should ensure that ventilation officers must be able to:

- develop a ventilation management plan
- develop a ventilation model for a mine
- conduct ventilation surveys
- understand and predict changes to the ventilation system
- address ventilation issues at a mine
- support the emergency management team in the event of an incident at a mine.

Once the advisory committee agreed on the content of the competency it was published in the table of competencies on 12 November 2018. The competency will become effective on 18 August 2021 to provide sufficient time for ventilation officers to achieve the necessary competencies.

## Supervisors of underground mines

The advisory committee is currently working with Simtars and the department on a supervisor competency for underground mines after the department advised that investigations into a number of incidents provided evidence of the need to revisit the competencies of site senior executives and supervisors at underground mines. The advisory committee is considering four key areas that it believes to be essential when looking at underground site senior executive competencies:

- legislative knowledge
- safety and risk management skills and experience
- technical knowledge required
- emergency management knowledge and experience.

The necessary mapping work has been undertaken and the advisory committee is considering the types of examinations prospective supervisors should undertake to ensure the skills they display are both relevant and practical.

The Australian Skills Quality Authority identifies training for underground mining executives at multiple levels. The advisory committee must determine the level of competency required for supervisors to ensure site senior executives have a suitable understanding of the technical issues and basic elements of underground mining.

Work on this competency will continue in 2019–20.

## Supervisor competencies

The advisory committee has worked with Skills Australia to consider potential changes to the competencies for supervisors on mines. Skills Australia is responsible for developing competencies on behalf of the Australian Government through the Australian Skills Industry Committee. The advisory committee is working with Skills Australia to ensure the competencies which are mandated for supervisors in the Queensland mining industry are suitable and in line with national standards.

## Stakeholder engagement

The committee consulted extensively with mining and quarrying stakeholders, including:

- the department's Occupational Health and Hygiene Unit on strategies for implementing measures to improve the health of mine and quarry workers
- mining and quarry industry senior stakeholders to understand the effectiveness of mine and quarry safety and health from a mine operator and a union perspective
- Safe Work Australia in relation to the respirable airborne contaminants occupational exposure standards review project and the impacts that may have on workplace exposure standards in Queensland
- Australian Skills Quality Authority in relation to the multitude of training programs being offered by registered training organisations, and concerns that some training is substandard, and the impact that may have on the effectiveness of mineral mine and quarry safety and health standards in Queensland
- management and workers at South32's Cannington mine, through a site visit, that looked at high potential incident management
- management and workers at the Sydney Metro project regarding management of respirable crystalline silica dust and other airborne contaminants
- Occupational Health Mining Advisory Committee in regard to the role of that committee in supporting the advisory committee regarding mine and quarry health standards and issues.

## FUTURE CHALLENGES

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The mining industry is constantly changing and can experience rapid changes in technology. In order to ensure the advisory committee can continue to provide relevant and useful advice to the Minister, members determined that there was a need to explore the short, medium and long-term priorities for safety and health in the mining and quarrying industry.

In March 2019, the advisory committee conducted a strategic planning session to:

- determine priority actions for the next three years
- ensure members understand their obligations as members of a government advisory committee
- ensure the strategic priorities of the Minister and the advisory committees are aligned.

It was determined that in order for the advisory committee to give relevant and useful advice and make recommendations to the Minister about promoting and protecting the safety and health of people at mines and quarries, the advisory

committee would need to be evidence-based in relation to safety and health issues.

To aid the advisory committee to better determine its priorities, the department demonstrated its hazard analysis tool which contains five years of data and would allow the advisory committee to analyse certain data prior to meetings.

It was noted that mere compliance with legislation and regulations does not make any industry safe. The Regulation acts as a part of the Queensland mining and quarrying industry's quality system to ensure that recognised good practice precautions for known hazards are not overlooked.

The focus of the advisory committee will be on the critical controls for which they have oversight function and are able to provide advice to the Minister on such as legislation, training requirements and competencies.

The strategic planning process will continue in 2019–20.



Mining Safety and Health Advisory Committee members at the Miners' Memorial Day 19 September 2019 L-R: Julie Devine, Commissioner for Mine Safety and Health and chair of the advisory committee Kate du Preez, Gavin Lawrence, Russel Wilson, Stephen Carson, Grant Egginton, Maryann Wipaki, John Hempseed, Katie Ormonde, Minister for Natural Resources, Mines and Energy Anthony Lynham

## EXPENSES INCURRED

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Members of the committee are not entitled to any remuneration other than the reimbursement of reasonable expenses and travel allowances to attend meetings.

The total advisory committee expenditure incurred by the Commissioner in 2018–19 in relation to the advisory committee was \$12,720.91.

EXPENSE	AMOUNT
Travel and accommodation	\$5654.66
Meetings (venue hire and catering)	\$1441.25
Contractors	\$5625.00
Total	\$12,720.91



