

Mining Safety and Health Legislation (Respirable Coal Dust and Silica) Amendment Regulation 2020

Explanatory notes for SL 2020 No. 169

made under the

Coal Mining Safety and Health Act 1999
Mining and Quarrying Safety and Health Act 1999

General Outline

Short title

Mining Safety and Health Legislation (Respirable Coal Dust and Silica) Amendment Regulation 2020

Authorising law

Section 282 of the *Coal Mining Safety and Health Act 1999*
Section 262 of the *Mining and Quarrying Safety and Health Act 1999*

Policy objectives and the reasons for them

Occupational lung diseases, such as coal workers' pneumoconiosis and silicosis, are caused by exposure to respirable dust over periods of time. A key objective of resources safety and health legislation is to protect the safety and health of persons at mines and quarries. This is achieved by requiring risk of injury or illness to any person from operations to be kept at an acceptable level, including risks associated with exposure to respirable dust.

The policy objectives of the *Mining Safety and Health Legislation (Respirable Coal Dust and Silica) Amendment Regulation 2020* are to:

1. Continue the Government's commitment to improving health outcomes for mine and quarry workers by preventing exposure to hazardous levels of respirable dust.
2. Ensure Queensland's mining safety and health legislation is consistent with the Safe Work Australia recommendations for exposure limits, which reflect the

most relevant scientific data and/or comparable exposure standards from international jurisdictions.

Safe Work Australia published revised exposure limits in December 2019 in Workplace Exposure Standards for Airborne Contaminants (the Safe Work Australia document). Both the agreed methodology through which the exposure limits were determined and the revised exposure limits have been the subject of extensive public consultation conducted by Safe Work Australia.

Safe Work Australia recommends exposure limits for airborne contaminants including:

- respirable coal dust – 3.0mg /m³ (transitioning to 1.5mg/m³ in October 2022)
- respirable crystalline silica – 0.05mg/m³.

For respirable crystalline silica, the Workplace Health and Safety Ministers nationally (except for Western Australia) have adopted the new exposure limit, including in Queensland where the recommended exposure limit was applied under workplace health and safety regulation from 1 July 2020.

Achievement of policy objectives

The policy objectives will be achieved by:

1. amending the *Coal Mining Safety and Health Regulation 2017* to:
 - reduce the exposure limit for respirable coal dust from 2.5mg/m³ to 1.5mg/m³ and;
 - reduce the exposure limit for respirable crystalline silica from 0.1mg/m³ to 0.05mg/m³.
2. amending the *Mining and Quarrying Safety and Health Regulation 2017* to:
 - reduce the exposure limit for respirable crystalline silica from 0.1mg/m³ to 0.05mg/m³

The new exposure limits will commence on 1 September 2020.

For respirable coal dust, implementation in Queensland coal mines will occur ahead of the Safe Work Australia recommended transition to 1.5mg/m³ in October 2022. The lower exposure limit for respirable coal dust is to be implemented ahead of other sectors and jurisdictions, as industry has for some time anticipated the reduced limits, has consistently been achieving compliance within the proposed limits and has the ability to continue to use existing monitoring programs until 31 December 2020.

For coal mines, transitional provisions will:

- Allow operators to continue all existing monitoring programs developed in line with *Recognised Standard 14 - Monitoring Respirable Dust in Coal Mines* (Recognised Standard 14) until it is amended.
- Allow operators to report single sample exceedances based on comparison with the exposure limit in effect prior to 1 September 2020 and based on the current requirements of Recognised Standard 14 until 31 December 2020.

- Require operators to use the new exposure limit for assessing average exposures across a similar exposure group and single sample exceedance monitoring and reporting from 1 January 2021.

For other mines and quarries, operators must use the new exposure limit for both single sample exceedance and average exceedance monitoring and reporting from 1 September 2020.

Consistency with policy objectives of authorising law

The *Mining Safety and Health Legislation (Respirable Coal Dust and Silica) Amendment Regulation 2020* is consistent with the policy objectives of the authorising law as it will ensure the health of persons at mines and quarries are protected.

Inconsistency with policy objectives of other legislation

The *Mining Safety and Health Legislation (Respirable Coal Dust and Silica) Amendment Regulation 2020* is not inconsistent with the policy objectives of other legislation.

Alternative ways of achieving policy objectives

There are no alternative ways identified to achieve the policy objectives.

Benefits and costs of implementation

Exposure limit changes are expected to improve the health and safety of mine and quarry workers by reducing their exposure to hazardous substances at the workplace. Over time, having exposure limits aligned with the most current epidemiological evidence, scientific data and comparable national and international exposure standards will have substantial benefits for industry and Queensland. This is expected to:

- reduce the estimated burden of disease from occupational hazards
- reduce average hospital treatment costs for work-related incidents
- reduce the number and cost of workers' compensation claims resulting from workplace exposure to hazardous chemicals, and
- improve the quality of life of workers due to improved workplace productivity and confidence in healthier workplaces.

There are well known and understood implications resulting from reducing the exposure limits for respirable coal dust and respirable crystalline silica in Queensland mining safety and health regulation. Changes to exposure limits are expected to beneficially affect stakeholder groups including workers, duty holders (i.e. employers), regulators and the broader community. These benefits will outweigh any anticipated

costs, as the new exposure limits do not represent a new cost to industry due to existing requirements on operators to monitor exposure limits.

The cost to industry relates to an increase in compliance costs. The exposure limit monitoring programs developed under Recognised Standard 14 and QGL02 – Guideline for Management of Respirable Dust in Queensland Mineral Mines and Quarries are based on a robust, risk-based methodology for each site. To adjust to new exposure limits, sites will be required to make changes to their plans and programs, and examine the processes used to determine single exceedances. There may be costs incurred to meet the new exposure limits and adjust the levels of control required to meet them. This will vary from site to site and on a case by case basis.

Costs may include for example: administration; renegotiation of equipment contracts; modifications of, and increase in, volume of personal protective equipment; development of new monitoring programs; modification to existing equipment and instrumentation; and changes to documentation.

Transitional provisions for coal mines are designed to align required changes with regular monitoring, reporting and review cycles, to ensure additional costs are kept to a minimum for operators.

Additional regulatory costs for government will be funded through realignment of existing resources.

Consistency with fundamental legislative principles

The *Mining Safety and Health Legislation (Respirable Coal Dust and Silica) Amendment Regulation 2020* is consistent with fundamental legislative principles.

Consultation

Consultation undertaken nationally by Safe Work Australia supported a standardised methodology for determining the impact of and best way to arrive at up to date exposure limits. Consultation outcomes during the specific exposure limit review processes for respirable coal dust and respirable crystalline silica informed considerations of Safe Work Australia in making recommendations on lowered exposure limits for respirable coal dust and respirable crystalline silica.

In Queensland, both the Coal Inspectorate and the Mineral Mines and Quarries Inspectorate have advised that Queensland's mining and quarrying operations were made aware of the Safe Work Australia recommendations and proposed changes to exposure limits through formal and informal presentations, network forums, site meetings and inspections between November 2019 and May 2020.

Key industry stakeholders were consulted on proposed changes to the exposure limits and implementation timeframes through the Coal Mining Safety and Health Advisory

Committee and the Mining Safety Health and Advisory Committee. Entities engaged in this process included the Queensland Resources Council, Cement Concrete and Aggregates Australia (CCAA), Australian Workers' Union, Australian Manufacturing Workers' Union, Electrical Trades Union and the Construction, Forestry, Mining and Energy Union.

Industry submissions responding to the draft *Mining Safety and Health Legislation (Respirable Coal Dust and Silica) Amendment Regulation 2020* and Information Paper confirmed general support and expectation for the proposed changes to exposure limits.

Some coal mine stakeholders, while supporting the lower exposure limits, raised concern about implementation timeframes and the application of Recognised Standard 14. Transitional provisions in the *Mining Safety and Health Legislation (Respirable Coal Dust and Silica) Amendment Regulation 2020* will allow existing dust monitoring programs to continue for coal mines until Recognised Standard 14 is revised. Resources Safety and Health Queensland will work with industry to develop the necessary changes to Recognised Standard 14 which will apply from 1 January 2021.

The CCAA raised concern about potential impact of the proposed change to the respirable crystalline silica exposure limit on the quarrying industry, particularly smaller operators in regional Queensland. The CCAA submission proposed a strategy for managing implementation. The Mineral Mines and Quarries Inspectorate will have regard to this strategy when implementing the proposed changes.

In accordance with the *Queensland Government Guide to Better Regulation*, consultation was undertaken with the Queensland Productivity Commission (QPC) about whether further regulatory impact analysis was required. QPC recommended that further consultation be undertaken. Provided further consultation was undertaken a Regulatory Impact Statement under the *Queensland Government Guide to Better Regulation*, was not required.

Further consultation has occurred with the Small Mines Associations including the Yowah Opal Mining Community Services Inc., the Queensland Boulder Opal Association Winton, the Sapphire Miners Association, the Gemfield Miners Rubyvale, the North Queensland Small Miners Association and the Local Government Association of Queensland. In addition, consultation has been undertaken with over 700 individual small mining operators. This consultation has been undertaken to ensure that there has been consultation across the breadth of regulated operators. Two submissions were received. The need for implementation to take into account the specifics of small mining operators was raised. As indicated above, the Mineral Mines and Quarries Inspectorate will have regard to the CCAA strategy proposed for managing implementation for small mining operators.