Mining Safety and Health Legislation (Health Surveillance) Amendment Regulation 2020

Explanatory notes for SL 2020 No. 108

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 (Health Surveillance) Amendment Regulation 2020.

Authorising law

Section 282 and Schedule 2, Part 2, Item 29 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

The International Agency for Research on Cancer has classified many potential respiratory hazards in mining and quarrying as Group 1 human carcinogens. These include mineral dusts arising from production and refining processes (like silica, aluminium, beryllium, iron, and cadmium) in addition to welding fumes and diesel engine exhaust.

The likelihood of developing lung disease is dependent on the amount, frequency and duration of exposure. Exposure to respiratory hazards can lead to the development of nodular diseases that cause scarring of the lungs, such as silicosis, obstructive diseases like emphysema, and lung cancer.

Following the re-identification of coal workers' pneumoconiosis in the coal mining industry in May 2015, the Queensland Government commenced a program of reforms to protect coal mine workers from the hazards associated with respirable coal mine dust. A significant proportion of these reforms were to the Coal Mine Workers' Health Scheme under the *Coal Mining Safety and Health Regulation 2017*. The *Mining Safety and Health Legislation (Health Surveillance) Amendment Regulation 2020*

(Amendment Regulation) aims to align respiratory health surveillance requirements for other mining and quarry workers with these reforms.

The current health surveillance obligations within the *Mining and Quarrying Safety and Health Regulation 2017* are general and cover all hazards in mines and quarries. In July 2017, the Queensland Government introduced a statutory guideline for the management of respirable crystalline silica in mines and quarries (referred to as QGL02[1]). Other government actions for this sector have focussed on communication, promotion of best practice, and compliance.

The application of QGL02 is limited to respirable dust as opposed to the full range of respiratory hazards and requires health surveillance if dust monitoring results exceed 50 per cent of the occupational exposure limit.

The objective of government action is to help to identify lung disease early, reducing health impacts, and to evaluate the effectiveness of primary hazard control measures. This is achieved by ensuring legislation is effective in providing a respiratory health surveillance framework for all mine (mineral and coal) and quarry workers.

Achievement of policy objectives

The Amendment Regulation achieves the stated objectives by amending the *Mining and Quarrying Safety and Health Regulation 2017* by:

- requiring site senior executives to arrange respiratory health surveillance for mineral mine and quarry workers;
- allowing site senior executives to assess the risk of respiratory hazards, and if they determine the risk is so low, it can be managed without respiratory health surveillance;
- requiring respiratory health surveillance to be undertaken prior to commencing work in the industry and then at least once every five years while working;
- stating the content of respiratory health surveillance such as a chest X-ray dual-read to the international standard, and a lung function test by spirometry;
- enabling workers to request a respiratory health surveillance assessment on retirement from the industry;
- enabling an appropriate doctor to delay a respiratory health surveillance examination by up to 12 months, where they deem the associated risk of delay to be lower than exposing the worker to the examination (e.g. pregnant workers and radiation from X-rays);
- a right for eligible retired and former mineral mine and quarry workers to request free respiratory health surveillance, arranged and paid for by the chief executive of the department administering the regulation and available once every five years.

The Amendment Regulation also achieves the stated objectives by amending the *Coal Mining Safety and Health Regulation 2017*. It allows an appointed medical adviser to delay a prescribed medical examination up to 12 months. This amendment aligns the Coal Mine Workers' Health Scheme with the *Mining and Quarrying Safety and Health Regulation 2017* and addresses an operational issue identified by stakeholders.

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[1] www.dnrme.qld.gov.au/__data/assets/pdf_file/0006/1263669/qgl02-guideline-mines-quarries.pdf

Arranging respiratory health surveillance

The objective of the Amendment Regulation is to identify lung disease early and enable the site senior executive to evaluate the effectiveness of primary hazard control measures.

In addition to the general health surveillance requirements under the *Mining and Quarrying Safety and Health Regulation 2017*, the site senior executive must ensure that each worker at the mine or quarry undertakes a respiratory health surveillance by an appropriate doctor at least once every five years.

The definition of an appropriate doctor has been changed to ensure that the quality of the medical services provided to the sector can be aligned to the Coal Mine Workers' Health Scheme. The accreditation and approval of doctors, and medical providers, under the Coal Mine Workers' Health Scheme provides a more robust approach, ensuring that the quality of medical services provided to mineral mine and quarry workers is of the same standard.

Low risk

The Amendment Regulation recognises that exposure to respiratory hazards is dependent on a number of factors that include but are not limited to, the task, controls, length and frequency of exposure, and therefore some workers are not at risk, or very low risk, from respiratory hazards.

The site senior executive through a risk assessment, that considers current and previous exposure, can determine that respiratory health surveillance is not required if the worker's exposure to respiratory hazards is so minimal that it can be effectively managed without respiratory health surveillance. This same mechanism applies under the Coal Mine Workers' Health Scheme.

If a worker's duties or tasks change, another risk assessment should be undertaken to ensure that exposure to respiratory hazards remain minimal.

Frequency of respiratory health surveillance

Due to the long latency period for lung disease and the fact that changes can happen over a number of years, it is important that respiratory health surveillance is undertaken periodically to identify abnormalities and to monitor any changes in lung function.

The site senior executive should arrange a respiratory health surveillance program in consultation with an appropriate doctor. The program should implement a frequency for respiratory health surveillance, including respiratory health examinations, that considers the respiratory hazard and exposure of a worker or group of workers. The maximum period between respiratory health surveillance must not be more than five years.

The appropriate doctor may, after undertaking respiratory health surveillance, recommend when the next respiratory health surveillance should be undertaken. However, the maximum time between respiratory health surveillance must not be more than five years.

Content of respiratory health surveillance
The required medical examinations will be consistent with respiratory screening provided for coal mine workers under the *Coal Mining Safety and Health Regulation 2017.*

The Amendment Regulation specifies that a respiratory health surveillance include a chest examination, chest X-ray that is dual-read to the International Labour Organization (ILO) International Standard, a spirometry test and comparison with previous spirometry results.

Respiratory health surveillance for retiring workers
The Amendment Regulation embeds in legislation the right for workers permanently leaving the mineral mine and quarry industry, and who had been a worker for at least three years, to request from their employer a respiratory health surveillance.

This recognises the long latency period for lung diseases and provides a more complete view of the worker population and their health into retirement, to inform health surveillance activities.

Delaying a medical examination
The Amendment Regulation recognises that in specific instances there may be a requirement to delay a respiratory health examination, for example to protect the person, or their unborn child. The appropriate doctor can delay a medical examination by 12 months in cases where the risk of adverse health impact to the person, and unborn child, from delaying the examination is considered to be lower than the impact of the examination.

This provision is to delay a specific respiratory health examination, and not respiratory health surveillance as a whole.

These provisions are also provided for coal mine workers through an amendment to the *Coal Mining Safety and Health Regulation 2017*.

Respiratory health surveillance for retired and former mineral mine and quarry workers
The Amendment Regulation embeds in legislation the right for former mineral mine and quarry workers who are permanently retired and had been a worker for at least three years to voluntarily access free respiratory health surveillance, arranged and paid for by the chief executive of the department administering the regulation.

This recognises the long latency period for lung diseases and provides a more complete view of the worker population and their health into retirement, to inform health surveillance activities.

Consistency with policy objectives of authorising law

The Amendment Regulation is consistent with the policy objectives of the *Coal Mining Safety and Health Act 1999* and the *Mining and Quarrying Safety and Health Act 1999* to ensure the safety and health of persons at mines (coal and mineral), quarries, and

those affected by operations, are protected. The Acts also require the risk of injury or illness to a person resulting from operations is at an acceptable level.

The objects of the *Coal Mining Safety and Health Act 1999* and the *Mining and Quarrying Safety and Health Act 1999* are achieved by means that include making regulations for the mining and quarrying industries to require and promote risk management and control, and providing for the health surveillance of mine (coal and mineral) and quarry workers.

Inconsistency with policy objectives of other legislation

The Amendment Regulation is consistent with the policy objectives of other legislation. It provides for the safety and health of mineral mine and quarry workers and brings those protections in line with the coal mining industry. This is consistent with other State laws relating to the protection of workers against harm to their health, safety and welfare through the elimination or minimisation of risks arising from work or from particular types of substances.

Alternative ways of achieving policy objectives

There were no viable alternative ways identified to achieve the policy objectives.

Benefits and costs of implementation

Early identification, together with the significant reduction in lung disease will have substantive benefits for the industry and Queensland. Lung disease, including silicosis and other mine dust lung diseases are progressive, preventable and potentially fatal. It can place a significant financial and social cost on workers, families, communities and government.

The Amendment Regulation may increase costs for employers, operators, and the State. The primary costs relate to the undertaking of the prescribed medical. This will not be a new cost to all of the industry, as operators are currently required to undertake monitoring and health surveillance under *Mining and Quarrying Safety and Health Regulation 2017.*

There will be additional costs for doctors, and medical providers, wanting to register and undergo accreditation under the framework for the Coal Mine Workers' Health Scheme. These costs include accreditation fees and ongoing training.

The government has been paying for respiratory health surveillance for former mineral mine and quarry workers since 1 March 2019, and will continue this arrangement under the amendments. These assessments ensure a more complete view of the worker population and their health into retirement.

Consistency with fundamental legislative principles

The *Legislative Standards Act 1992* requires an assessment of the consistency of the regulation with fundamental legislative principles (FLPs) and, if there are inconsistencies with FLPs, the reasons for the inconsistency. The Amendment Regulation is consistent with FLPs, however, where it is possible that certain provisions may be considered inconsistent with FLPs, justifications for sufficient regard to the FLPs, or for the inconsistencies are provided in the following.

Sufficient regard to the institution of Parliament
Section 4(5) of the *Legislative Standards Act 1992* requires subordinate legislation to have sufficient regard to the institution of Parliament. This includes whether it is within the power and consistent with the objectives of the authorising law, and that legislative power is only delegated in appropriate cases to appropriate persons.

The amendments fall within the scope of specific regulation-making powers relating to health surveillance under both the *Mining and Quarrying Safety and Health Act 1999* and the *Coal Mining Safety and Health Act 1999.* Provisions related to health surveillance already exist in each regulation to which the amendments are made.

Civil Penalties
An additional civil penalty related to non-compliance with health surveillance for mineral mine and quarry workers is also included. Civil penalties are necessary to provide for action to be taken to address non-compliance, in particular where a breach requires direct redress and is sufficiently significant to warrant a financial penalty.

Prescribing the breaches to which civil penalties apply within the regulations does not of itself create any new obligations or requirements. The *Mining and Quarrying Safety and Health Act 1999* contains overarching safety and health obligations that must be achieved to maintain an acceptable level of risk to the safety and health of workers at a mine or quarry. For the majority of obligations for which a civil penalty could be applied, the detail of the obligation is articulated in the regulation. For this reason, the *Mining and Quarrying Safety and Health Regulation 2017* contains the prescribed breaches to which a civil penalty contained in the Act will apply. This is consistent with existing arrangements for offences about safety and health obligations.

Schedule 5A to the *Mining and Quarrying Safety and Health Regulation 2017* provide that a civil penalty may be imposed for failure to meet obligations pertaining to health assessments of workers. Health assessments monitor the workers' ability to tolerate a hazard without harm, whilst health surveillance checks for changes in the workers' health as a result of exposure to a hazard. Health assessment and health surveillance are equally important in ensuring the safety and health of workers. The amendments aim to ensure that similar action can be taken where there is a breach relating to health surveillance. The penalty provisions for health assessments and health surveillance are the same.

International Labour Organization Guidelines
A central element of respiratory health surveillance is the standardised classification of chest X-rays to screen for pneumoconioses. The purpose of this standard approach is to ensure accurate and consistent reporting, follow-up investigations of abnormal

results, comparison of data for epidemiological investigations and research. The internationally recognised standard recommended by an independent review of the Coal Mine Workers' Health Scheme by Monash University following the re-identification of coal workers' pneumoconiosis in Queensland, was the International Labour Organization's "Guidelines for the use of the ILO International Classification of Radiographs of Pneumoconioses".

The Guideline is the globally recognised and accepted standard since 1950 and was developed by technical experts from across the world, following extensive consultation with international peak bodies, government bodies and experts. The most recent 2011 edition was developed by experts primarily from the United States including the federal government's National Institute for Occupational Safety and Health, the University of Michigan, Virginia Commonwealth University, West Virginia University, and the University of Cincinnati. Other experts were from hospitals and universities in France, Germany, Japan and Brazil.

The ILO standard consists of a scale of increasing severity of abnormalities and a set of reference X-ray images for each category. The guidelines also include technical requirements for viewing equipment, image quality ratings, and methods for describing shape and position of abnormalities in the lungs. The Coal Mine Workers' Health Scheme through the *Coal Mining Safety and Health Regulation 2017* has adopted these guidelines. To achieve consistency and implement best practice across the sector, the Amendment Regulation proposes the use of this international guideline as a standard in the mineral mine and quarry sector.

The Amendment Regulation will reference the published guideline, rather than a specific edition. This approach is potentially a breach of the FLPs as parliament will not be able to consider any updates. The guideline is highly technical and updates have focussed on providing new standard reference X-ray images. Given its stability and global use for seven decades, it is extremely unlikely that Queensland would take a conflicting view on any future changes to the standards. The proposed approach will ensure that the legislative framework remains aligned with industry expectations and standards, and ensures that the latest standards can be adopted effectively and efficiently. In addition, the guidelines are amended infrequently, following extensive consultation with international peak bodies, government bodies and experts.

Rights and liberties of individuals

The right to privacy, the disclosure of private or confidential information, doctor-patient confidentiality, and privacy and confidentiality issues have generally been identified by the former Scrutiny of Legislation Committee as relevant to consideration of whether legislation has sufficient regard to individuals' rights and liberties. Furthermore, Section 4(2)(a) of the *Legislative Standards Act 1992* requires subordinate legislation to have sufficient regard to rights and liberties of individuals.

It is noted that the Amendment Regulation does not alter the existing requirements for the appropriate doctor to disclose the outcome of health surveillance to the site senior executive. This disclosure may contain private and confidential information, but is not a copy of the medical record. The appropriate doctor may provide a copy of the medical record to the site senior executive only with the worker's written consent.

The disclosure of the outcome of the health surveillance may impact on the privacy of the worker. However, this is required to ensure the effective management of risk by the site senior executive. As such, it is considered that the benefit of disclosure of this information outweighs any negative impact on the privacy of the worker.

Section 255 of the *Mining and Quarrying Safety and Health Act 1999* prohibits the disclosure of information about a person's personal affairs obtained in the administration of the Act except in limited circumstances. These circumstances include with the individual's consent or in the administration of the Act. Section 120 of the *Mining and Quarrying Safety and Health Regulation 2017* ensures that a worker's medical record is only obtained by the site senior executive with the worker's written consent. The *Mining and Quarrying Safety and Health Regulation 2017* also prohibits a site senior executive disclosing the contents of a worker's medical record except to the worker or to another person with the worker's written consent.

Consultation

Consultation undertaken and stakeholder feedback
The amendments are closely aligned to the changes and improvements delivered to improve health surveillance of coal mine workers following the re-identification of coal workers' pneumoconiosis and other mine dust lung diseases in 2015.

As part of the development and implementation of the reforms to the Coal Mine Workers' Health Scheme, the Department of Natural Resources, Mines and Energy (DNRME) released a series of discussion papers between 2016 and 2018. The issues discussed in these papers included chest X-rays, spirometry, doctor training and experience, and health surveillance for former and retired coal miners. The DNRME implemented a tripartite consultation model involving DNRME, coal mining companies and unions.

In developing QGL02, consultation was undertaken in discussion with the Mining Safety and Health Advisory Committee (MSHAC), which includes tripartite representation from the regulator, industry and workers. Presentations were also provided to the Cement Concrete & Aggregates Australia (CCAA), the Institute of Quarrying Australia as well as other engagement with the industry. Whilst health surveillance forms part of the guidance, discussions with industry were focussed on the sections assessing risk and the monitoring of respirable crystalline silica.

Mining Safety and Health Advisory Committee (MSHAC)
The DNRME has consulted and engaged with MSHAC since November 2018 on these amendments. MSHAC is chaired by the Commissioner for Mine Safety and Health and includes members from the Queensland Resources Council, CCAA, the Australian Workers' Union and the Australian Manufacturing Workers' Union.

Exposure draft of proposed subordinate legislation
In December 2019, DNRME issued a consultation paper and exposure draft to key stakeholders, including mine site senior executives, peak bodies representing workers, industry and medical providers. In total, the consultation paper was sent to over 1,500 individuals and organisations.

The DNRME also consulted with Queensland Health, the Office of Industrial Relations, the Department of Local Government, Racing and Multicultural Affairs, the Department of Transport and Main Roads, Department of Employment, Small Business and Training, the Department of Justice and Attorney-General, the Department of the Premier and Cabinet and Queensland Treasury on the proposed amendments.

Results of consultation

Submissions on the consultation draft of the amendments were received from BHP, the Australian Faculty of Occupational and Environmental Medicine, the Australian Medical Association Queensland, CCAA, the Electrical Trades Union, a combined submission from the Lung Foundation Australia and the Cancer Council Queensland, the Queensland Resources Council, the Queensland Small Miners Council (QSMC), the Local Government Association of Queensland, Sonic Health Plus, and individual current and former miners.

The majority of stakeholders generally supported the amendments, with minor proposed changes to the drafting of specific provisions. Further changes to the amendment regulation were made following consultation, including increasing the transitional period and minor clarification to a number of sections. Other identified issues will be addressed through statutory guidance and the communication of the amendments.

The QSMC did not support the amendment regulation, citing insufficient evidence to justify the changes and that it will needlessly add considerable costs to their operations that should be addressed through a Regulatory Impact Statement. The QSMC proposed that small scale miners be exempt because any risk can be sufficiently managed through utilisation of personal protective equipment. The amendment regulation allows an operator to self-assess the risks of respiratory hazards and decide not to undertake respiratory health surveillance. This applies if the risk is so low it can be managed without health surveillance and has been adopted from the Coal Mine Workers' Health Scheme.

DNRME will work with stakeholders, including the QSMC, to develop statutory guidance that provides a framework for this risk assessment process. Concerns about costs related to the medical and any associated travel for those not considered low risk, can be mitigated by a new mobile health service that will provide end-to-end respiratory health surveillance across regional Queensland. DNRME will ensure the mobile health service frequently visits small- scale mining regions to allow workers to access these services without travelling to major regional centres.

Regulatory Impact Analysis

A Preliminary Impact Assessment was prepared under the Queensland Government Guide to Better Regulation. The Office of Best Practice Regulation was consulted and advised that further regulatory impact analysis was not required as the amendment regulation had already undergone an extensive impact assessment process.

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