

3rd December 2024

Safe Work Australia
GPO Box 641
CANBERRA ACT 2601

Via Consultation Hub: <https://consult.swa.gov.au/wel-consultation>

Consultation on the impacts of the proposed introduction of new workplace exposure limits for 9 chemicals: specifically Respirable Crystalline Silica (RCS)

Cement Concrete & Aggregates Australia is the voice of the heavy construction materials industry in Australia. CCAA members produce the majority of Australia's cement, concrete, and aggregates, which are crucial to Australia's building and construction sectors.

These materials support the development of our nation's transport, energy, water, housing, defence, and social infrastructure.

The industry generates approximately \$15 Billion in annual revenues and employs approximately 30,000 Australians directly and a further 80,000 indirectly.

Summary

- The heavy construction materials extractive industry takes the protection of its workers very seriously in relation to all safety matters including RCS.
- The heavy construction materials extractive sector has worked closely with Safe Work Australia (SWA) and regulators in all jurisdictions to support the implementation of the halving of the RCS Workplace Exposure Standard (WES) from 1 July 2020.
- CCAA was one of the first peak bodies to produce comprehensive guidance for managing the RCS risks in quarry operations.
- CCAA welcomes the findings of the Oct 24 SWA impact analysis of a proposed further 50% reduction in the RCS WES.
- The findings support CCAA's long held concerns that costs are likely to exceed benefits by nearly 8:1 for the mining sector (which includes the extractive industry).
- CCAA remains concerned that any further halving of the WES is likely to direct resources away from businesses seeking to apply the hierarchy of controls, monitoring and behavioural education and systems, to further reduce risks to workers.

Recommendation

CCAA supports policy option 1: Retain the current WES for RCS at 0.05 mg/m³

Industry context

CCAA strongly recognises the significant hazard that *Respirable Crystalline Silica (RCS)* presents for many workers in Australia across a broad range of industries including manufacturing, stonemasonry, construction, tunnelling, demolition, mining and quarrying.

Dust containing RCS can arise from several processes in the extractive operations of rock such as drilling, blasting, crushing and handling rock and other minerals containing Quartz, although actual extractive processes differ by the type of rock being extracted.

When airborne, ongoing inhaling of RCS for extended periods, at concentrations above the WES, can cause silicosis, a fibrosis (scarring) of the lungs resulting in loss of lung function and lead to a range of respiratory diseases.

However, practices adopted across the heavy construction materials extractive sector to limit exposure to airborne contaminants, such as wet methods to suppress dusts, local exhaust ventilation, positive pressure cabins and worker segregation from high-risk areas, have been in place for many years and are considered effective. These practices have been very effective in minimising RCS exposure across the sector.

CCAA also acknowledges the significant financial and non-financial costs associated with silicosis and related disease. These include physical and emotional harm, reduced ability to work and quality of life, as well as the costs incurred upon the public health system (such as health screening, diagnosis, treatment, disease management) and the workers' compensation system.

A shared objective to protect workers

We note the primary objective of government intervention is to reduce workplace exposure to RCS and to reduce the number of cases of preventable silicosis and silica related diseases, and premature invalidity or death of workers. We understand the need for government and regulators to address this matter and we share this objective.

The heavy construction materials sector has a strong track record in protecting its workers from the risks of exposure to RCS and supports practical, evidence-based regulation and policy options which are supported by appropriate education and compliance activities.

We remain firmly of the view that had such measures been applied to the engineered stone benchtop industry, incidences of Silicosis could have been effectively managed without any further reduction to the Workplace Exposure Standard (WES).

Despite this, the extractive sector has worked closely with Safe Work Australia (SWA) and regulators in all jurisdictions to support the implementation of the halving of the RCS WES from 1 July 2020.

State and territory regulator feedback to CCAA with regards to member company proactivity to ensure compliance with the new WES, suggests that that our sector continues to demonstrate a proactive approach to minimising its risk to workers from RCS exposure.

CCAA was one of the first peak bodies to produce comprehensive guidance for managing the risk of RCS in quarry operations and has actively supported the review of the model WHS regulations and other silica regulations across all jurisdictions.

CCAA remains confident that when all parties work together to actively manage a safety risk to workers, across all elements from behavioural and systems approaches to awareness and training (not just an exposure limit), real safety improvements can be made.

Costs significantly outweigh benefits at nearly 8:1

We have always argued that the universally accepted principle of ‘as low as reasonably practicable’ (ALARP) must be applied when weighing the risks against the time and costs required to control it. Even with infinite resources, no risk can be completely eliminated and there are diminishing returns as the reasonably practical controls reach their limit.

This is supported by the Australian Institute of Occupational Hygienists (AIOH) in their recent position paper¹ that notes:

- *The statement that “there is no safe limit” for RCS is incorrect. Evidence indicates that there is a threshold concentration below which there is no indication of adverse health effects.*
- *The AIOH recommends limiting worker exposure to RCS to as low as reasonably practicable (ALARP) to be at all times below an 8-hour time weighted average (TWA) guidance exposure value of 0.05 milligram (mg) respirable fraction in each cubic metre (m³) of air or the level set by the jurisdiction Governing the worksite. Given the uncertainties around measurement at levels lower than 0.05mg/m³, setting a trigger level (normally half of the WES) is not recommended. Any exceedances to 0.05 mg/m³ should trigger investigation of the sources of exposure and implementation of suitable control strategies as well as health monitoring.*

CCAA supports the findings of the regulatory impact analysis for the proposed WES for RCS for the mining industry (including extractive industries) that found costs of \$18.725 billion exceed benefits of \$2.448 billion; a ratio of nearly 8:1².

We note that the nature of the mining and extractive industries, and the regulatory impacts as outlined in section 6.9.2, is well understood as to how it substantially differs from other sectors such as the stone benchtop industry. The nature of controls is such that engineering controls (e.g. conveyor guards, transfer curtains, stockpile covers, water dust suppression, machine cap filtration, and HEPA vacuums and filters) account for 82.5% of the costs. Most of these controls are extremely expensive and impractical in an open-air extractive operation.

Additional costs for administrative controls \$2.7 billion (15%), PPE \$331 million (2%) and air monitoring (0.5%) are a much smaller percentage relative to the cost of engineering controls.

It should also be noted that measurement of an RCS WES at 0.025 mg/m³ (half the current WES) requires a trigger point (action level) of 0.0125 mg/m³, which is practically undetectable in quarry environments in the open air and also impractical to measure against for regulators. This adds not only uncertainty but also complexity and indirect cost for both industry and regulators.

¹ AIOH Position Paper– Respirable Crystalline Silica and Occupational Health Issues – (Nov 2024) pg 9

² SWA Consultation paper Impact analysis of the proposed workplace exposure limits for 9 chemicals pg 46

This is also confirmed by the recent AIOH position paper³ that states:

- *There are limitations in measurement technology which restrict the accurate measurement of very low-level exposure below 0.025 mg/m³. Therefore, the AIOH recommends near full shift monitoring and sample analysis by a laboratory accredited by the National Association of Testing Authorities (NATA), applying standardised analysis and reporting methods.*

We also **support** the findings that under a high-cost scenario, total costs could reach \$23.4 billion with devastating impacts on the viability of many low margin small businesses for little or no benefit⁴.

While these costs must be weighed against the health benefits, the majority of these are health benefits alone which don't factor in the significant benefits already being delivered as a result of halving the original WES in 2020, associated health campaigns, significantly stronger regulation and monitoring. CCAA supports the findings that there are likely to be very little further benefits; direct or indirect⁵.

CCAA remains concerned that any further halving of the WES is likely to direct much needed resources away from businesses seeking to apply the hierarchy of controls, of monitoring and behavioural education and systems to further reduce risks to workers. The ALARP principle would not be upheld if the RCS WES was further halved.

Recommendation

CCAA supports policy option 1: Retain the current workplace exposure standard (WES) for RCS at 0.05 mg/m³

To discuss this submission further, please contact Brian Hauser brian.hauser@ccaa.com.au.

Yours sincerely

MICHAEL KILGARIFF
Chief Executive officer

³ AIOH Position Paper– Respirable Crystalline Silica and Occupational Health Issues – (Nov 2024) pg 9

⁴ SWA Consultation paper Impact analysis of the proposed workplace exposure limits for 9 chemicals pg 47

⁵ SWA Consultation paper Impact analysis of the proposed workplace exposure limits for 9 chemicals pg 49