



National Silicosis Prevention Strategy 2023-2028 and accompanying National Action Plan

Submission to Lung Foundation Australia

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About CME

The Chamber of Minerals and Energy of Western Australia (CME) is the peak representative body for the resources sector in Western Australia (WA). CME is funded by member companies responsible for more than 91 per cent of the State's mineral and energy workforce employment.¹

In 2021-22, the industry reported a record value of \$230 billion, with iron ore the most valuable commodity at \$137 billion.² Petroleum products (including crude oil, condensate, natural gas, liquefied natural and liquefied petroleum gas) followed at \$50.2 billion, with gold third at \$17 billion. The value of royalties received from the sector totalled over \$11 billion in 2021-22, accounting for 27 per cent of general government revenue.³ The sector is a significant contributor to local, State and Australian economies.

Summary of recommendations

A summary of recommendations pertaining to each priority area is included below, with further supporting detail outlined in the following submission.

Consultation

- CME recommends Lung Foundation Australia (Lung Foundation) consider a longer time frame for the proposed 2023–2028 National Silicosis Prevention Strategy (NSPS) and accompanying National Action Plan (NAP) to ensure all priority areas can be addressed.
- CME recommends increased collaboration with other organisations undergoing Respirable Crystalline Silica (RCS) consultation, such as Safe Work Australia and state regulators.

Workplace risk reduction

- CME recommends further stakeholder consultation to ensure the option of a prohibition on the use of engineered stone considers appropriate definitions that limit unintended consequences.
- CME recommends that any requirements developed through the NSPS or NAP do not present duplication of existing legislative requirements on the resources sector.
- CME recommends that the Lung Foundation explore a regulatory approach that facilitates continuous improvement efforts and ongoing communication with state regulators.
- CME recommends further consultation on the operationalisation of the National Register.
- CME recommends that Lung Foundation consider how existing legislative requirements for a Safe work method statement (SWMS) or similar risk assessment processes can be best utilised.
- CME recommends that supplementary guidance be developed to support the process, built on the SWA SWMS material to provide a consistent approach to safety risk management.
- CME recommends practical and pragmatic approaches where the body of knowledge on workplace exposure standard (WES) risk is not yet developed and is supportive of Lung Foundation acknowledging further research is required.

Education and awareness

- CME supports further education and awareness initiatives and recommends collaboration with the relevant resources industry cluster throughout the development of initiatives.

Health monitoring, screening and surveillance

- CME request further clarity on the intent of the improved health monitoring requirements to ensure there is no duplication with existing WA legislation.

Governance

- CME recommends further consultation on the creation of a governance framework to ensure broader government arrangements are considered.

¹ Government of Western Australia, [2021-22 Economic indicators resources data](#), onsite employment under State legislation, Department of Mines, Industry Regulation and Safety, 5 October 2022.

² Government of Western Australia, [Latest statistics release](#), Department of Mines, Industry Regulation and Safety, 5 October 2022.

³ Government of Western Australia, [2021-22 Annual report on State finances](#), Department of Treasury, 28 September 2022, pp. 8.

Context

Lung Foundation Australia (Lung Foundation) was appointed by the Australian Government's Department of Health and Aged Care to facilitate the development of the *2023–2028 National Silicosis Prevention Strategy* (NSPS) and accompanying *National Action Plan* (NAP).⁴ The NSPS and NAP outline the commitment to help protect Australian workers and eliminate silicosis as an occupational lung disease in Australia.

Many types of rocks, sand, and clay contain crystalline silica naturally and respirable crystalline silica (RCS) can be generated through resource-related operations. When absorbed into the lungs repeatedly as very small crystalline silica dust particles, it poses a significant health risk that can cause silicosis, lung disease and kidney disease. Acknowledging the irreparable damage that exposure to RCS with insufficient control measures poses, the WA resources sector thereby initiates robust measures to identify and manage exposure.

CME appreciates the opportunity to provide feedback as part of the public consultation process towards the draft NSPS and NAP. Industry recognises the foregoing concerns regarding silica-induced occupational illnesses and remain steadfast in their application of best practice for continuous improvement with regard to the prevention, identification, and mitigation of hazardous RCS exposure.

Consultation

Consultation draws on the knowledge and experience of subject matter experts, stakeholders and other representatives to ensure informed decisions can be made about how work should be carried out safely. Effective consultation promotes greater awareness, commitment and fosters positive working relationships.

CME recognises consultation timeframes differ depending on the complexity of the issue, and believe RCS is a complex technical matter which requires ample timeframes to reflect that. The short timeframe for consultation on the NSPS and NAP may impact the ability to obtain meaningful feedback from stakeholders. Notwithstanding the considerable and constantly evolving work already implemented and underway, including the consultation into the elimination engineered stone which is taking place in parallel to this piece.⁵ Companies have complex internal processes for obtaining feedback from subject matter experts internally and subsequently responding to public consultation processes themselves or through industry bodies. CME believes a four-week timeframe not adequate to achieve this.

With consideration to the silica-related consultations that are taking place in addition to the NSPS and NAP, CME sees benefit in collaboration and communication with other organisations undergoing consultation to ensure there is consistent management of RCS exposure.

CME recommends Lung Foundation consider a longer time frame for the proposed NSPS and NAP to ensure all priority areas can be addressed.

CME recommends increased collaboration with other organisations undergoing RCS consultation, such as Safe Work Australia and state regulators.

Workplace Risk Reduction

CME welcomes this commitment to reducing workplace risk and recognises the shared responsibility of industry, government, and individuals to regulate and enforce measures to reduce RCS in the workplace. Before implementing additional mitigation strategies, CME believes that further consideration should be given to potential regulatory complexities and suggests that the Lung Foundation consider the unintended consequences that may be averred to other industries.

1.1 Definitions of Engineered Stone

Engineered stone refers to a composite slab of stone that is often created from crushed quartz and is primarily used for countertops in bathrooms and kitchens. The use of engineered stone outside of the WA resources sector has been considered as a major factor in the resurgence of silicosis. CME recognise that occupational RCS exposure can be present in many industries, including the resources sector, and agree safeguards must protect workers.

⁴ Lung Foundation Australia. [Overview: National Silicosis Prevention Strategy](#)

⁵ Safe Work Australia. [Consultation Regulation Impact Statement - Managing the risks of respirable crystalline silica](#). August 2022

The WA resources sector invests heavily to ensure best practice management of risks posed by RCS in the workplace. The systems and technologies in place to measure, monitor and control exposures are designed to both comply with relevant standards and to ensure as far as reasonably practicable the health and safety of employees. For example, industry must ensure no person is exposed to a substance in an airborne concentration that exceeds the predetermined exposure standard.⁶ Any additional regulation or requirements must be implemented in a way that is effective in both improving compliance and reducing risk.

The engineered stone industry is mostly associated with short-term RCS exposure at high concentrations, which differs from the challenges faced within the resources sector. As a result, CME did not take a position on the prohibition of engineered stone in the [Consultation Regulation Impact Statement \(CRIS\) on managing the risk of RCS](#). Notwithstanding, CME would like to emphasise the significance of stakeholder consultation to inform this decision, making sure that suitable definitions of engineered stone are considered to limit unintended consequences. For example, Victoria's Occupational Health and Safety Amendment Regulations consider engineered stone to contain at least 40% or more content of crystalline silica, while Safe Work Australia provides more descriptive definitions of engineered stone.^{7,8} Consideration should be given to a definition that specifically pertains to engineered stone rather than a quantity of silica within a product. CME believes a definition developed outside of stakeholder consultation may inadvertently capture other workplaces, which goes against the intent of the proposed prohibition of the use of engineered stone.

CME recommends further stakeholder consultation to ensure the option of a prohibition on the use of engineered stone considers appropriate definitions that limit unintended consequences.

1.2 Air Monitoring

Air monitoring is the assessment of pollutant levels by measuring the quantity and types of airborne contaminants in the surrounding, outdoor air. Industry considers air monitoring as crucial to the prevention of worker exposure to airborne contaminants, reducing work-related injury, diseases and fatalities. Air monitoring is a requirement for mine operators if there is an exposure hazard.⁹ Industry has invested significantly over the recent decades to collate analyse and enter over 123 216 RCS samples into the state regulators Safety Regulation System (SRS). As with all health and safety hazards, industry takes a risk-based approach to the management of occupational health hazards. Industry uses exposure standards to assess and review the effectiveness of controls. Their focus is on ensuring the risks associated with exposure are minimised as far as reasonably practicable. For all WA mine sites in there has been high compliance with the RCS Workplace Exposure Standard (WES). Given the existing requirements regarding the provision of workplace air monitoring reports to regulators, there must be consideration to the risks of duplication in the introduction of any new requirements, creating an unnecessary regulatory burden.

CME recommends that any requirements developed through the NSPS or NAP do not present duplication of existing legislative requirements on the resources sector.

Industry sees benefit in increased collaboration between state regulators to promote proactive continuous improvement efforts. This should be informed by the best available information regarding recommended exposure standards and effective controls to ensure compliance with the WES. Regular communication and updates will be key to ensuring regulatory expectations are met.

CME recommends that the Lung Foundation explore a regulatory approach that facilitates continuous improvement efforts and ongoing communication with state regulators.

1.3 National Register

CME recognise the importance of health monitoring, surveillance and screening to support better case identification and enable early intervention which is critical to better health outcomes. A National Disease Registry (the National Registry) is a proposed initiative to capture silica-related disease notifications to assist the understanding of both incidence and prevalence. In principle, the establishment of the National Registry will support the capture of notifications of silicosis, from all jurisdictions, allowing for earlier detection of hazards as well as new cases of disease. If the National Registry was embedded, CME believes the analysed

⁶ Work Health and Safety (Mines) Regulations 2022 (WA). reg 49.

⁷ Occupational Health and Safety Regulations 2012 (Vic). reg 5.

⁸ SafeWork Australia. *Model Code of Practice: Managing the risks of respirable crystalline silica from engineered stone in the workplace*. 26 October 2021

⁹ Work Health and Safety (Mines) Regulations 2022 (WA). reg 50.

and aggregated trends/ insights should be relayed to industry to drive targeted improvements without fear of reprisal.

For this to work, further clarity is required to understand how the National Registry intends to be operationalised. Notably, how confidentiality and privacy are managed and how results will be considered in the context of specific industries, recognising RCS exposure risks in industry differs from that of construction work. Further, clarifying how state regulators will collaborate with the Commonwealth to link standardised data points and provide tangible benefits.

CME recommend further consultation on the operationalisation of the National Register take place.

1.4 Safe Work Method Statement

A Safe Work Method Statement (SWMS) is a document that identifies the high-risk work activities that will be carried out in a workplace, the hazards arising from these activities and the measures that will be put in place to control the risks. SWMS are already a requirement for high-risk construction work.¹⁰

Industry conducts comprehensive risk assessment processes and procedures to comply with State legislation. For example, State legislation requires employers, in consultation with workers, to identify hazards, assess risks and implement practical controls to protect workers' health and safety¹¹. Further, mine sites must prepare and implement a health management plan (HMP).¹² The HMP identifies all health hazards that may have an adverse effect on the health of any worker or other person, including, but not limited to heat, contaminants, humidity, and noise. The HMP provides controls to minimise exposure and monitor risk.¹¹

CME recommends that Lung Foundation consider how existing legislative requirements for a SWMS or similar risk assessment processes can be best utilised.

CME believes that if a SWMS document or something similar was introduced, supplementary guidance that adequately explains RCS safe work methods must also be considered. To maintain consistency across jurisdictions, consultation may also encourage increased collaboration between state regulators and the Commonwealth. Additional clarification is also required to determine whether a SWMS will be integrated into current procedures, including consideration to risks of duplications when interacting with existing systems such as the HMP or safety cases.

CME recommends that supplementary guidance be developed to support the process, built off the SWA SWMS material to provide a consistent approach to safety risk management.

1.5 Review WES

CME has previously provided support for regular evaluations of WES values which reflect the most recent high-quality evidence, ensuring that employees are safeguarded from the onset of occupational illnesses.¹³ ¹⁴ Previous CME submissions have communicated the risks of adopting a conservative approach, in the absence of supporting evidence, with a potentially damaging effect on the way risks in this area are managed.

The WA resources sector focuses on managing exposures to risk and believes it is important WES values do not represent a line in the sand between 'safe' and 'unsafe' work environments. Purely focusing on a figure may divert attention from the essential aspects of risk-based approaches and effective regulation. These concerns were echoed by the Australian Institute of Occupational Hygienists (AIOH) as outlined in their [CRIS](#) published in August 2022. Further, a report released by Safe Work Australia investigated the challenges of measuring airborne concentrations of respirable crystalline silica in Australian workplaces at and below 0.02 mg/m³.¹⁵ The report found that at low airborne concentrations of respirable crystalline silica the uncertainty of the measurement was much higher.

¹⁰ Government of Western Australia. [Code of Practice: Construction work](#). Department of Mines, Industry Regulation and Safety, 15 July 2022, pp. 26.

¹¹ Work Health and Safety Act 2020 (WA). S. 18.

¹² Work Health and Safety (Mines) Regulations 2022 (WA). reg 622.

¹³ Chamber of Minerals and Energy. [Submission to the National Dust Disease Taskforce Consultation Paper](#). 25 November 2020.

¹³ Chamber of Minerals and Energy. [Submission to the SafeWork Australia Consultation Regulation Impact Statement Managing the risks of respirable crystalline silica](#). 31 August 2022.

¹⁵ SafeWork Australia. [Report into the effectiveness of sampling and analysis of respirable crystalline silica at a workplace exposure standard eight-hour time weighted average of 0.02 mg/m³](#). Glossop Consultancy. 28 June 2022.

CME is concerned that reducing the WES value has the potential to foster a compliance-based culture, which emphasises adherence over continuous improvement. The WES needs to be able to be reliably measured to protect worker health. Therefore, until there is accurate measurement and sufficient certainty when measuring RCS, a reduction should not be considered.

CME recommends practical and pragmatic approaches where the body of knowledge on WES risk is not yet developed and is supportive of Lung Foundation acknowledging further research is required.

Education and Awareness

Targeted education and awareness of RCS ensure roles and responsibilities are clearly defined, understood and effectively implemented. CME has long advocated for evidence-based, and subject matter informed training to support occupational exposure awareness.^{16,17} To guarantee that the information is understood, literacy and comprehension must also be considered.

The existing Unit of Competency (UoC) provides a foundation to increase awareness and knowledge of RCS related hazards.¹⁸ As it stands, registered training organisations (RTO) may only deliver the training if they have permission from the course owner. Transitioning to a nationally accredited approach would make training available to all RTOs who apply to have it on their scope, increasing the availability to the wider workforce. CME agrees that a national requirement for accredited silicosis prevention awareness is a priority mechanism to mitigate workplace risk. As seen with the existing UoC specialising in the construction and jewellery industries, opportunity exists to develop tailored content specific to the unique work environment of the resource sector.

To ensure training is consistent and bespoke for industry, it should be created and delivered through collaboration with the relevant industry clusters. For mining, this would be undertaken with the Australian Minerals and Energy Skills Alliance (AUSMESA) and encompassed within a Resources and Infrastructure Industry (RII) training package as a unit of competency. There must be quality assurance, industry engagement, and a standardisation framework which underpins key industry concepts throughout development. Considering both the outcomes of the unit and how the unit will be assessed. CME would welcome the opportunity to consult further on the proposed targeted education and awareness initiatives.

CME supports further education and awareness initiatives and recommends collaboration with the relevant resources industry cluster throughout the development of initiatives.

Health Monitoring, Screening and Surveillance

Health monitoring is the monitoring of a worker by doctors to identify changes in their health status due to potential exposure to an airborne substance. Health monitoring enables the early identification and effective management and treatment of RCS. Identifying early changes and potential adverse health effects from occupational exposures enables early clinical intervention and modifications in the workplace to prevent serious and irreversible damage to health. Under WA's safety legislation, it is stipulated that a person conducting a business or undertaking (PCBU) must ensure that health monitoring is provided to workers if they are exposed to RCS. This is achieved through a low dose high resolution computed tomography (HRCT) scan of the chest, superseding the chest X-ray in WA as the radiological screening test for occupational exposure to silica.¹⁹ The legislation below states the health monitoring requirements for RCS:

*"Low dose high resolution computed tomography of the chest at less than 1 millisievert (mSv) equivalent dose for the entire study. The study must image the whole of each lung on inspiration at 1.5 mm slice thickness or less, without an interslice gap, and must include expiratory imaging. The images must be of adequate quality to detect subtle abnormalities, including ground glass opacities and small nodules."*²⁰

Industry recognises the importance of early clinical intervention to stop serious and irreversible health damage. As a result, the resource sector has high level of compliance with current regulatory requirements

¹⁶ Chamber of Minerals and Energy. [Submission to the National Dust Disease Taskforce Consultation Paper](#). 25 November 2020.

¹⁷ Chamber of Minerals and Energy. [Submission to the SafeWork Australia Consultation Regulation Impact Statement Managing the risks of respirable crystalline silica](#). 31 August 2022.

¹⁸ Australian Government. 10830NAT Course in Crystalline Silica Exposure Prevention. 25 November 2019.

¹⁹ Work Health and Safety (Mines) Regulations 2022 (WA). Schedule 14.

²⁰ Work Health and Safety (Mines) Regulations 2022 (WA). Schedule 14.

due to a systematic approach to risk management which highlights the importance of both preventative and mitigating controls. For example, industry also employ standardised respiratory function tests and questionnaires in addition to collecting demographic, medical and occupational history for RCS.

CME acknowledges the direction of health monitoring in WA but cautions against taking a blanket approach in the absence of further consultation and clarity. Many factors, such as access of HRCT scans, need to be addressed, particularly in regional and remote areas. Otherwise, implementation issues may arise.

Implementation issues from lack of consultation may also arise in priority activity 3.6, which discusses the development of a competency-based silicosis accreditation program for medical professionals who undertake health screening assessments (the Accreditation Program). For example, the availability of personnel and the proposed activities required to maintain accreditation. This could be addressed through a staged approach to implementation, necessitating appropriate consultation and consideration to the existing landscape of medical resources.

CME request further clarity on the intent of the improved health monitoring requirements to ensure no duplication with existing WA legislation.

Governance

CME understands the value of governance frameworks that allow for the escalation and resolution of concerns. Governance pertaining to RCS should be underpinned by both mitigation and prevention, seeking input from multidisciplinary experts.

Industry supports leaning on subject matter expertise; however, holds concerns about an overarching framework being set that may erode the positive work underway by the state regulators. For example, CME recognises that employers, employees, and government are all part of the resources sector and therefore collaborate regularly to ensure priorities and outcomes are set. In WA, this is evidenced by the constructive work through the Work Health and Safety Commission (WHSC) and the Mining and Advisory Petroleum Commission (MAPAC). For example, the consultation and endorsement of RCS codes of practice in addition to the WorkSafe WA Dust Strategy.^{21, 22}

CME believes that further consultation on priority area four will help achieve the best outcomes, with consideration to the intended structure and broader governance arrangements. Current governance structures such as WHSC and MAPAC, should be used where applicable rather than creating new ones, to avoid redundancy and promote efficiency.


CME recommends further consultation on the creation of a governance framework to ensure broader government arrangements are considered.

Conclusion

The WA resources sector is committed to the health and safety of its workforce and the elimination of silicosis as an occupational lung disease in Australia. As with all health and safety hazards, industry takes a risk-based approach to the management of occupational health hazards. CME welcomes the Lung Foundation commitment to consulting with industry to identify feedback on the priority areas outlined.

CME looks forward to the opportunity to continue engagement on this important matter. Should you have any questions regarding this submission, please contact Naomi Plummer, Policy Adviser – Health, Safety and People on 0439 843 968 or n.plummer@cmewa.com.

Yours sincerely,



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²¹ Government Of Western Australia. [Code of Practice Managing the risks of respirable crystalline silica from engineered stone in the workplace](#). Department of Mines, Industry Regulation and Safety. 14 July 2022.

²² Government Of Western Australia. [Dust Strategy 2023-24](#). Department of Mines, Industry Regulation and Safety. 21 December 2022.