

Public consultation on the prohibition on the use of engineered stone

Date: 12 April 2023

On behalf of: Stephen Crawford, Acting AWU National Secretary



Submission – Public consultation on the prohibition on the use of engineered stone.

Thank you for the opportunity to provide feedback on the policy options for the prohibition on the use of engineered stone. The Australian Workers' Union (AWU) represents around 72,000 workers in a diverse range of industries: mining, energy, manufacturing, civil construction, agriculture, along with many others. The AWU has provided a number of submissions on the matter of respirable crystalline silica (RCS). The AWU supports the submission of the Australian Council of Trade Unions (ACTU) to this Draft RIS.

The AWU calls for a prohibition on the use of all engineered stone products. This includes a ban on all engineered stone products regardless of content of crystalline silica. The ban should be supported by exemptions similar to those for asbestos containing materials including for the handling, transport and any other activity related to the safe managing or removal of the product.

The crystalline silica content in engineered stone can vary but is typically greater than 90% crystalline silica. Crystalline silica particles are released into the environment when work is conducted on the stone with use of power tools. Stonemasons perform work on this product and are at the greatest risk of developing silicosis.

All evidence leads to the conclusion that it is not safe to work with engineered stone products. Current analysis indicates that the engineered stone sector, which represents less than 1% of the Australian workforce, contributes to more than 10% of the overall burden of silicosis in the country.¹ Other analysis suggests that between 1 in 10 and 1 in 4 Australian engineered stone workers have been diagnosed with some form of silicosis. Alarming, the dangers of disease are not simply reduced when exposure ceases. Workers exposed to RCS during the processing of engineered stone can experience rapid progression of silicosis, even after they have stopped working with the material. This finding is of significant concern as it demonstrates that simply

¹ Carey R and Fritschi L, 2022, The future burden of lung cancer and silicosis from occupational silica exposure in Australia: A preliminary analysis. Curtin University.

removing exposure to RCS is not sufficient to prevent the progression of the disease.²

Studies have shown there is a difference in the level and type of dust generated from processing engineered stone and natural stone. The study found that workers fabricating engineered stone countertops experienced higher exposures to RCS compared to those working with natural stone. This difference in dust generation highlights the increased risk of silicosis for workers processing engineered stone as opposed to natural stone, emphasising the need to potentially ban the use of engineered stone to protect workers' health.³ There are additional concerns relating to emissions from engineered stone such as resin content of dust emissions. Resin content from engineered stone can range from 8% to 20%.⁴

The current use of controls has proven to be inadequate. This is likely due to the intrinsic nature of working with engineered stone as studies have found that despite existing preventive measures, an unacceptable risk condition persisted.⁵

The Model WHS Act requires PCBUs to do whatever is so far as reasonably practicable to protect workers from ill health. The factors that must be considered when assessing what is so far as reasonably practicable include; likelihood of hazard/risk occurring, degree of harm, availability and suitability of alternatives, knowledge of risks involved.

The sector as a whole has demonstrated an inability or disinclination to comply with workplace health and safety laws. A study involving members of the AIOH revealed that most respondents believed that the primary obstacle to sufficient prevention of exposure to RCS was identified as "insufficient management commitment and

² Leon-Jimenez, Artificial Stone Silicosis - Rapid Progression Following Exposure Cessation, Chest 2020

³ Zwack LM, Victory KR, Brueck SE, Qi C. Evaluation of Crystalline Silica Exposure during Fabrication of Natural and Engineered Stone Countertops. Cincinnati; 2016. Contract No.: HHE Report No. 2014-0215-3250

⁴ Ramkissoon C, Gaskin S, Thredgold L, Hall T, Rowett S, Gun R. Characterisation of dust emissions from machined engineered stones to understand the hazard for accelerated silicosis. Scientific Reports. 2022;12(1):1-0.

⁵ Carrieri et al 2020, IJERPH. 17(12):4489–4415



financial resources."⁶

For these reasons the AWU calls for the banning of engineered stone.

Proposed percentage threshold for silica in bulk product

The existing 40% silica content threshold permitted by the Victorian Regulations does not sufficiently safeguard workers' health and was established for operational purposes, rather than health considerations. The AWU does not support a percentage threshold cut-off in bulk products. A percentage threshold of crystalline silica that is protective of worker health has not been determined by research. If there were such capacity to determine this threshold, then it may well be worth examining. However, the AWU strongly supports the banning of engineered stone while this necessary research takes place. Australian workers have not consented to be the lung test dummies of the world until the safety of engineered stone products is determined.

In the event policy makers choose to allow the use of engineered stone products with lower crystalline silica content, it is essential for policymakers to establish a rigorous, tripartite licensing system that covers importers, manufacturers, and fabricators of engineered stone products. This regulatory framework should enforce substantial penalties for the procurement or installation of engineered stone products from unlicensed importers, manufacturers, or fabricators.

Regarding legacy products, an appropriate licensing scheme must be implemented for those involved in alteration, removal, demolition, and incidental tasks. The Victorian licensing scheme serves as a valuable foundation for expansion to include all work with potential exposure risks.

Considering the consistently high levels of non-compliance among fabricators, any licensing system must incorporate a 'fit and proper' person assessment that takes into

⁶ Cole, K., et al., Prevention of the Occupational Silicosis Epidemic in Australia: What Do Those Who Assess Workplace Health Risk Think Should Be Done Now? *Annals of Work Exposures and Health*, 2023. Volume 67(Issue 2): p. 281–287.



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account the overall compliance history of the business concerning health and safety laws. Furthermore, the system must be supported by a nationwide compliance and enforcement policy that ensures license revocation in cases of non-compliance.





Appendix 1

Consultation RIS questions

Q1. Do you support a prohibition on the use of engineered stone? Please support your response with reasons and evidence.

See above.

Q2. If yes, do you support a prohibition on the use of all engineered stone irrespective of its crystalline silica content? Please support your response with reasons and evidence.

See above.

Q3. If no, do you support a prohibition of engineered stone that contains more than certain percentage of crystalline silica? If yes, at what percentage of crystalline silica should a prohibition be set? Please support your response with reasons and evidence.

See above.

Q6. Do you have any data or information on the risks to workers from the other non-crystalline silica elements of engineered stone? Are these risks increased in engineered stone of less than 40% crystalline silica content?

See above.

Q10. Should there be a transitional period for a prohibition on engineered stone? If so, should it apply to all options and how long should it be?

The AWU does not support a transition longer than mid-2024 because workers are being exposed to real harm right now and it is imperative that governments act to remove this harm as quickly as possible.