Submission No 5

INQUIRY INTO 2021 REVIEW OF THE DUST DISEASES SCHEME

Organisation: Cancer Council & Lung Foundation Australia

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The Hon. Wes Fang MLC
Chair
Standing Committee on Law and Justice
Parliament of New South Wales
Parliament House
Macquarie Street
Sydney NSW 2000

law@parliament.nsw.gov.au

Dear Mr Fang,

2021 Review of the Dust Diseases Scheme

Cancer Council and Lung Foundation Australia welcome the opportunity to provide a submission to the New South Wales Legislative Council's Standing Committee on Law and Justice 2021 Review of the Dust Diseases Scheme. Cancer Council is Australia's peak non-government cancer control organisation, and Lung Foundation Australia is Australia's peak non-government lung health organisation. Together we continue to advocate for improved protections of workers and in particular the protection from dust lung disease including silicosis and lung cancer. Cancer Council's Occupational and Environmental Cancer Committee includes members with national standing in relevant disciplines including epidemiology, molecular biology, occupational health, occupational hygiene, clinical oncology, and public health, including Lung Foundation Australia. Comments from the Committee form the basis of this submission and their contribution is acknowledged.

It is noted from the media release dated 1 September 2021, that the committee will again consider the prevention, treatment, and management of silicosis in the manufactured stone industry.

We commend the progress that has been made in NSW to combat the re-emergence of silicosis since the 2019 Review of the Dust Diseases Scheme. This includes introducing an amendment to the *Work Health and Safety Regulation 2017* explicitly banning the practice of dry processing including grinding, polishing and cutting and providing SafeWork NSW inspectors with the power to issue on-the-spot fines for non-compliance; requiring all medical practitioners to notify NSW Health when they diagnose a case of silicosis in NSW; establishing the NSW Dust Disease Register; and completing a case finding study in the NSW manufactured stone industry.

Despite progress on many of the recommendations from the 2019 Review of the Dust Diseases Scheme, it is clear that further reforms are required. It is becoming increasingly clear that it is not safe to work with manufactured stone products – silicosis caused by manufactured stone occurs earlier than with natural stone, it progresses faster than would be expected given previous experience with silica exposure in other workplace settings, and it progresses even after removal from exposure.[1,2] To ensure continued improvements in the response to silica dust exposure in the manufactured stone industry we highlight some areas for your consideration below.

[1] León-Jiménez A, Hidalgo-Molina A, Conde-Sánchez MÁ, Pérez-Alonso A, Morales-Morales JM, García-Gámez EM, Córdoba-Doña JA. Artificial Stone Silicosis: Rapid Progression Following Exposure Cessation. *Chest*, 2020;158(3): 1060–1068. doi: 10.1016/j.chest.2020.03.026
[2] Leso V, Fontana L, Romano R, Gervetti P, Iavicoli I. Artificial Stone Associated Silicosis: A Systematic Review. *International Journal of Environmental Research and Public Health*, 2019;16(4):568. doi: 10.3390/ijerph16040568.

A national ban on the importation of engineered stone products.

Silica dust is classified as a Group 1 carcinogen by the International Agency for Research on Cancer, because prolonged exposure to respirable crystalline silica (RCS) increases the risk of lung cancer. An estimated 230 people develop lung cancer each year in Australia due to past exposure to silica dust at work[3], but this number may well rise as a result of workers' exposure to very high levels of silica dust in the manufactured stone industry since the early 2000s. This is in addition to the significant burden of other dust lung diseases, and the risk that workers who experience pre-existing conditions face. We jointly support the call for a ban on the importation of manufactured stone (high silica content) because workers handling and processing this product have close to a one in four chance of developing silicosis[4], a disease which is progressive, incurable, and can be fatal, in addition to an increased risk of developing lung cancer.

Preventing exposure to silica dust from engineered stone products is the most effective way to prevent silicosis and other silica dust related diseases including lung cancer, in the Australian engineered stone industry. The best way to achieve this is through the application of the hierarchy of control. Sitting atop the hierarchy of control as the most effective risk control measure is elimination. High silica content engineered stone is not manufactured in Australia. Banning its importation is a practical solution and the most effective way to prevent this dangerous product causing more devastating disease. We need to immediately identify the most effective ways to implement a ban on the use of high silica content manufactured stone and to support industry acceptance and utilisation of safer substitutes. We support a three-year phase out of manufactured stone, with a total ban in July 2024 or sooner. We believe this is feasible, and further delays of this decision is increasing the number and likelihood of Australians being exposed to this carcinogen and experiencing a debilitating and life-limiting lung disease.

A health-based workplace exposure standard

We note that the Standing Committee's Recommendation 7, "*That the Minister for Better Regulation ensure that steps are taken to further reduce the workplace exposure standard* [WES] *to a time weighted average of 0.02 mg/m3 for non-mining industries as soon as possible, to ensure workers are protected from the harmful effect of silica dust.*", was supported in principle by the NSW Government, and that the revised standard of 0.05mg/m^3 commenced on 1 July 2020 in NSW. The Cancer Council and Lung Foundation Australia agrees with this recommendation and supports reducing and enforcing the exposure limit for RCS to 0.02 mg/m^3 measured over an 8-hour period. The current WES of 0.05mg/m^3 is not a health-based standard. An exposure standard of 0.025mg/m^3 has been identified as reducing the risk of lung cancer to an acceptably low level.[5] Implementing this health-based standard will provide better protection for workers than the current WES.

The measurement issues, being raised as an argument against lowering the WES to 0.02mg/m^3, must be addressed as a matter of priority, with research funding being provided for the development of new sampling/analytical techniques if necessary. There is evidence that the proposed exposure limit of 0.02mg/m^3 can be measured with minimum detectable

[3] Institute for Health Metrics and Evaluation (IHME). GBD Compare. Seattle, WA: IHME, University of Washington, 2015. Available from http://vizhub.healthdata.org/gbd-compare. (Population attr butable fraction calculated by T. Driscoll; Accessed 20 Sept 2017).

[4] National Dust Disease Taskforce, *Final Report to Minister for Health and Aged Care*, June 2021, p.7

[5] American Conference of Governmental Industrial Hygienists, *Silica, Crystalline – alpha-Quartz and Cristobalite: TLV® Chemical Substances*, 2010, ACGIH: Cincinnati, OH.

concentrations ranging from 0.005 to 0.01mg/m^3 over an 8-hour period.[6,7,8] We urge the Standing Committee to reemphasise the need for the Minister for Better Regulation to take steps to implement a health-based WES of 0.02mg/m^3.

We also note that since the introduction of the 0.05mg/m^3 standard on 1 July 2020, 25 notices have been issued to manufactured stone workplaces (plus another 12 workplaces in the construction industry) for failure to comply with the WES.[9] This is evidence that workers continue to be exposed to harmful levels of silica dust in the workplace despite increased efforts to raise awareness and improve compliance. We recommend that the Standing Committee supports greater enforcement of the WES in all workplaces where RCS is present.

Low dose high resolution CT scans required for manufactured stone workers

We note that the NSW Government supported in principle the Standing Committee's third recommendation in the 2019 review, "*That low dose high resolution CT scanning, and not a chest x-ray, should be the preferred diagnostic measure for any person who has had significant exposure to silica dust from manufactured stone.*" The NSW Government included in their response that, *"CT scans are now a routine part of the health monitoring process facilitated by icare for workers with significant exposure to respirable crystalline silica, or for workers who show potential abnormalities on other respiratory function testing."* Since then, further evidence has emerged that low-dose high-resolution CT scans are more effective than chest X-rays in detecting early lung changes indicative of silicosis.[10] Based on this evidence, on 15 January 2021, the Western Australia Government passed legislation making low-dose high-resolution CT scans mandatory for workers whose health is at risk following exposure to respirable crystalline silica.[11,12] Cancer Council and Lung Foundation Australia strongly support a similar change in the NSW legislation so that low-dose high-resolution CT scans are used instead of chest X-rays whenever lung imaging is undertaken of workers in the manufactured stone industry.

A nationally consistent approach to silica regulation

Exposure to RCS in manufactured stone workers was the impetus for the establishment of the National Dust Diseases Taskforce and is an important focus for this review. Manufactured stone is not the only source of exposure to RCS. The prevention of silicosis and the minimisation of silica exposure in construction workers, tunnellers, quarry workers and others is just as important. We support a regulatory approach that removes all doubt and provides duty holders with clarity about the risk control measures necessary for "high-risk" silica processes. We recommend governments adopt consistent regulation across all jurisdictions so that the hierarchy of controls are employed to reduce exposure to RCS below 0.02mg/m^3, across all industries.

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[6]HSE (Health and Safety Executive) MDHS101/2 2015, *Measurement of Quartz in Respirable Airborne Dust by Infrared Spectroscopy and X-Ray Diffractometry*. Available from http://www.hse.gov.uk/pubns/mdhs/pdfs/mdhs101.pdf

[7]Stacey P, Thorpe A, Echt A. Performance of High Flow Rate Personal Respirable Samplers When Challenged with Mineral Aerosols of Different Particle Size Distributions. *The Annals of Occupational Hygiene*, 2016;60(4):479-92.

[8]NIOSH (National Institute for Occupational Safety and Health) (2003) *Manual of Analytical Methods (NMAM). Silica, Crystalline, by XRD (filter redeposition) Method 7500.* Issue 4. Available from https://www.cdc.gov/niosh/docs/2003-154/pdfs/7500.pdf

[9]NSW Government, Silica Dashboard, October 2021, [cited 23 November 2021]. Available at: https://www.nsw.gov.au/customer-service/publications-and-reports/silica-dashboard

[10]Government of Western Australia, WorkSafe WA, *WorkSafe Western Australia silica compliance project*, July 2021. Available from: https://www.commerce.wa.gov.au/sites/default/files/atoms/files/silica_compliance_report.pdf

[11] Johnston, B. *Health surveillance requirements for silica strengthened*, 15 January 2021 (Media statement). Available from: https://www.mediastatements.wa.gov.au/Pages/McGowan/2021/01/Health-surveillance-requirements-for-silica-strengthened.aspx

[12]Government of Western Australia, WorkSafe WA, *Silica Dust (respirable crystalline) – Health Surveillance – Guide for medical practitioners*, May 2021. Available at: https://www.commerce.wa.gov.au/worksafe/silica-dust-respirable-crystalline-health-surveillance-guide-medical-practitioners

Please do not hesitate to contact Anita Dessaix, Director, Cancer Prevention and Advocacy, Cancer Council NSW, at , should you require additional information or have any queries in relation to this submission.

Yours sincerely,

Jeff Mitchell
Chief Executive Officer
Cancer Council NSW

Mark Brooke
Chief Executive Officer
Lung Foundation Australia

Professor Tim Driscoll
Chair, Occupational and Environmental
Cancer Committee
Cancer Council Australia