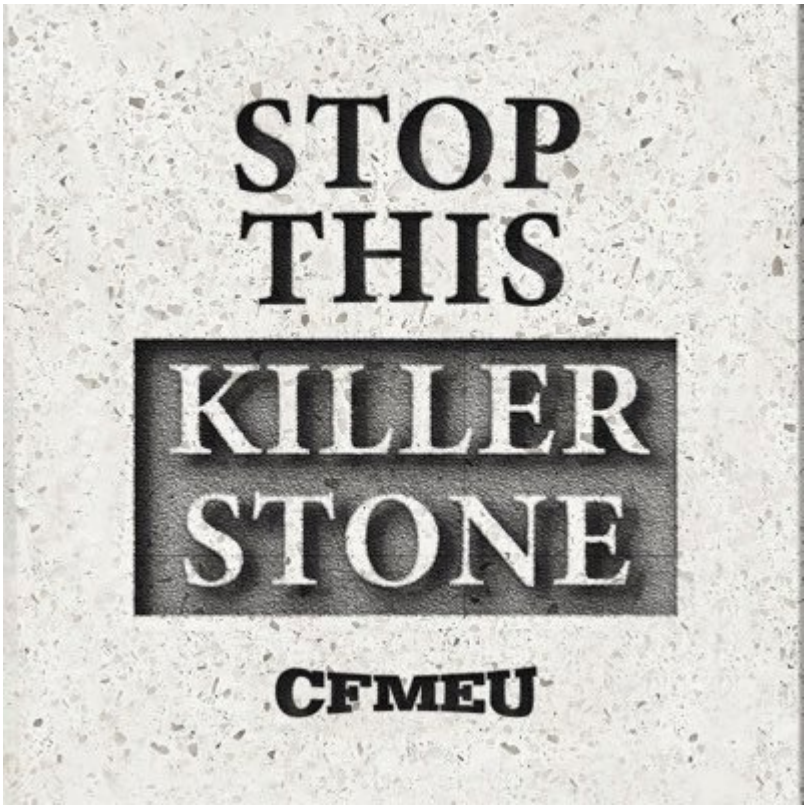
CFMEU

CONSTRUCTION

Submission in Response to the Public Consultation on the Prohibition on the Use of Engineered Stone



14th April 2023

Introduction

1. The Construction, Forestry, Maritime, Mining and Energy Union (Construction and General Division) (**CFMEU**) is the primary union covering and organising workers in in the building and construction industry in Australia. Our members work in a diverse range of occupations in the different sectors of the industry including excavation, stonemasonry, demolition, tunnelling, quarrying, and the off-site manufacture of building products (including but not limited to precast concrete, brick, tile and ceramics, plaster products, shop fitting and joinery). Due to the work performed by our members they come into contact with materials and products containing varying levels of crystalline silica, including respirable crystalline silica (**RCS**).
2. Inhaling RCS can lead to a range of respiratory diseases which can be irreversible and fatal. Whilst the dangers of working with stone and breathing in dust have been known for centuries, it is over the past 30 years that we have witnessed an upsurge in workers affected by these respiratory diseases, especially silicosis. Part of this upsurge can be attributable to the introduction of engineered stone in the late 1980's.
3. On the 28th February 2023 the Work Health and Safety (**WHS**) ministers met and considered the Safe Work Australia (**SWA**) *Decision Regulation Impact Statement: Managing the risks of respirable crystalline silica at work* (Decision RIS) which analysed the impacts of regulatory and non-regulatory options to manage the risks of respirable crystalline silica (**RCS**) at work.
4. At this meeting the WHS ministers agreed to:
    - implement Option 2 - National awareness and behaviour change initiatives
    - implement Option 5a - Regulation of high-risk crystalline silica processes for all materials (including engineered stone) across all industries, and
    - further analysis and consultation on Option 6 - Prohibition of use of engineered stone, including consideration of silica content levels and other risk factors, and a national licensing system for products that are not subject to a ban or legacy products.
5. In March 2023 SWA released a consultation paper for the *Public consultation on the prohibition on the use of engineered stone* (**SWA Prohibition Consultation Paper***)* .

This consultation paper presented three options for a prohibition on the use of engineered stone:

- prohibition on the use of all engineered stone described in Option 6 of the Decision RIS
- prohibition on the use of engineered stone containing 40% or more crystalline silica, and
- prohibition on the use of engineered stone containing 40% or more crystalline silica and licensing of PCBUs working with engineered stone containing less than 40 % crystalline silica.

6. SWA is seeking stakeholder feedback on the proposed options, including evidence and data to inform the impact analysis of these options.
7. Although submissions were requested to be sent by 2nd April 2023, the CFMEU requested and was granted an extension until 14th April 2023. The CFMEU makes this submission in accordance with that extension.

CFMEU Recommendations

8. For the reasons outlined in this paper the CFMEU makes the following recommendations:

Recommendation 1

That a prohibition on the use of all engineered stone be implemented as a matter of priority. This prohibition is to apply to all engineered stone irrespective of the percentage of silica content.

Recommendation 2

That the prohibition on the use of all engineered stone products should remain in place until:

- **It can be demonstrated by independently gathered, analysed and reviewed scientific evidence that higher order risk control measures will maintain exposures below the 50% action level of the WES for RCS.**
- **The establishment of a national exposure standard for dusts/particulates from the processing of engineered stone. Such an approach would be similar to that taken for wood dusts and would ensure coverage of constituents of the complex mixtures of engineered stone – e.g. all forms of crystalline silica, amorphous silica, pigments and resins bound to particulates.**
- **If a cut-off threshold for percentage of silica in the bulk product is to be established, this must be for all forms of silica (i.e. must include amorphous silica and cristobalite) that can produce respirable crystalline silica during processing, installation and removal.**
- **A robust, tripartite licensing regime is introduced that licenses both the importers, manufacturers and fabricators of engineered stone products. The regulatory regime should provide for significant penalties applying to the purchase, acquisition or installation of engineered stone products from non-licensed importers, manufacturers or fabricators of engineered stone products.**

Recommendation 3

That any exemption for in situ engineered stone products be limited to the handling, transport and any other activity associated with safely managing or removing engineered stone.

Recommendation 4

That a national licensing scheme be introduced for any company/organisation involved in the handling, transport and any other activity associated with safely managing or removing in situ engineered stone. Such licensing scheme should include:

- **Mandatory training of all workers in silica awareness, fit-testing of respirators, use of on tool dust extraction equipment, and air monitoring requirements.**
- **Mandatory registration of all workers on the relevant dust disease register.**
- **Mandatory six monthly health monitoring and silicosis screening of all workers.**
- **Proof of adequate workers compensation coverage for all workers, including where appropriate contributions to a national compensation scheme for affected workers.**

Recommendation 5

That mandatory silica awareness training be required for all workers who may be exposed to silica dust in the workplace, including workers who perform minor work such as installing new taps or new power points in engineered stone products.

Why a Prohibition on the Use of Engineered Stone is Required

9. Engineered stone is a manufactured product. In defining engineered stone, the definition contained in the *Work Health and Safety (Managing the Risks of Respirable Crystalline Silica from Engineered Stone in the Workplace) Code of Practice 2022* is a useful reference point. It states that:

> "*engineered stone is an artificial product that:*
>
> *a) is created by combining and heat curing natural stone materials that contain crystalline silica (such as quartz or stone aggregate) with chemical constituents (such as water, resins or pigments), and*
>
> *b) can be manipulated through mechanical processes to manufacture other products (such as kitchen benchtops).*
>
> *Engineered stone does not include natural stone that has not been combined with other products or heat cured (for example granite and quartz in their natural state).*
>
> *Engineered stone is also known as composite stone, manufactured stone, artificial stone, reconstituted stone or quartz conglomerate.*"[1] (footnotes omitted)

10. Engineered stone was introduced in the late 1980's, as a cheaper and lighter product than natural stone and has become the fashionable product of choice for kitchen benchtops in many countries including Australia. There is however a life threatening safety risk associated with the use of engineered stone. According to the June 2021 Final Report of the National Dust Diseases Taskforce (**NDDT Final Report**),

> "*Australia's building boom during the 2000s led to an increase in the use of engineered stone in the construction industry, particularly as a cost-effective material for kitchen and bathroom construction. Since its introduction, engineered stone has grown to a market-dominant position.*

[1] *Work Health and Safety (Managing the Risks of Respirable Crystalline Silica from Engineered Stone in the Workplace) Code of Practice 2022*, p.6

The significant rise in cases of accelerated silicosis has been associated with the increased importation and use of artificial or engineered stone in Australia.

While a clear link between exposure to engineered stone and silicosis has been identified, some areas of uncertainty remain. For example, there are questions over whether the resins in engineered stone also contribute to silicosis, or whether it is solely the silica content that is responsible.

"There is no good reason why an advanced economy such as Australia should have workers suffering from silicosis and accelerated silicosis. The current situation results from a failure of regulation, in learning from the past and responding to new consumer demands, and a lack of understanding by employers and workers of the risks associated with exposure to respirable silica dust, including in new forms combined with resins and plastics in manufactured stone." *– Health agency*" [2] (footnotes omitted)

11. The NDDT Final Report further noted that:

"*There is evidence to suggest that nearly one in four engineered stone workers who have been in the industry since before 2018, are suffering from silicosis or other silica dust related diseases. Existing WHS regulatory frameworks have not effectively protected people working with engineered stone.*"[3]

12. How workers become exposed to RCS through the use of engineered stone, was identified in the June 2022 SWA *Consultation Regulation Impact Statement: Managing the risks of respirable crystalline silica at work* (**CRIS**), which noted that,

"*Many materials used to fabricate products, such as engineered stone benchtops, contain varying levels of crystalline silica. RCS is released when materials containing silica are processed, particularly with power tools. When airborne, workers can inhale RCS deep into their lungs where it can lead to a*

[2] National Dust Disease Taskforce's Final Report to the Minister for Health and Aged Care, June 2021, p.14-15

[3]Ibid, p.7

range of respiratory diseases, including silicosis, progressive massive fibrosis, chronic obstructive pulmonary disease, chronic bronchitis, and lung cancer.

Silicosis is a serious, irreversible lung disease that causes permanent disability and can be fatal. A silicosis diagnosis can have serious impacts on all aspects of as person's life and that of their families. There is no proven treatment for silicosis other than a lung transplant. However, all silicosis and silica related diseases are preventable."[4]

13. As other submissions will no doubt attest to, and as SWA has already recognised, the evidence of the link between the use of engineered stone and workers contracting silicosis is irrefutable. The evidence also shows that silicosis, caused through the use of engineered stone, is killing workers. It is preventable and must be stopped. The quickest way to do this is by prohibiting the use of engineered stone.

14. Some opposed to the prohibition on engineered stone argue that new engineered stone products are being developed with lower levels of silica. One example is Consentino's "silestone®". According to the company's Safety Data Sheet for the product, the level of crystalline silica content varies from 1-10% for Q10, 11-40% for Q40, 41-50% for Q50 and 51-90% for Others.[5]

15. Even though there are lower levels of silica contained in the product, the Safety Data Sheet still contains the following warnings:

"*However, given that it contains crystalline silica (SiO2) as quartz or cristobalite, dust particles may be generated during the mechanical processing or preparation of Silestone®, Silestone® Integrity®, N-BOOST by Silestone® or ECO by Cosentino® (cutting, shaping, perforation, engraving, etc.). These particles, which include respirable crystalline silica, may remain suspended in the air. Large-scale inhalation of this portion of mineral dust and crystalline silica can cause serious illnesses, including pneumoconiosis,*

[4] CRIS, p.5

[5] silestone® Safety Data Sheet, Rev12-11/2021, Print Date November 2021, p.4

pulmonary fibrosis (silicosis), lung cancer, chronic obstructive pulmonary disease (COPD) and kidney disease."

……

"***Hazard statements***

Silestone Q10:

H373*: May cause damage to organs (lungs) through prolonged or repeated exposure (via inhalation)*

H350i*: May cause cancer by inhalation.*

H335*: May cause respiratory irritation.*

Silestone Q40, Q50 and rest of products:

H372*: Causes damage to organs (lung) through: prolonged or repeated exposure (via inhalation).*

H350i*: May cause cancer by inhalation.*

H335*: May cause respiratory irritation."*[6]

16. As the above information from a manufacturer demonstrates, decreasing the content of silica does not remove the hazards to workers who cut, shape, perforate, engrave, etc, the product. Using the hierarchy of controls, the best way to protect workers is to eliminate the risk by prohibiting the product.

17. There are also sound reasons for keeping the prohibition into the future. There is insufficient evidence to show that engineered stone can be safely used. There is no independently gathered, analysed and reviewed scientific evidence that higher order risk control measures will maintain exposures below the 50% action level of the Workplace Exposure Standard (WES) for RCS.

18. In addition, there are significant gaps in the regulatory arena. There is no national exposure standard for dusts/particulates from the processing of engineered stone. A national exposure standard is required that covers the constituents of the complex

[6] Ibid, p. 5

mixtures of engineered stone, e.g. all forms of crystalline silica, amorphous silica, pigments and resins bound to particulates.

19. Further, while some States such as Victoria have introduced a licensing scheme (although there is no evidence yet to show that it is effective), there is no national robust, tripartite licensing regime that licenses both the importers, manufacturers and fabricators of engineered stone products. Any regulatory regime should provide for significant penalties applying to the purchase, acquisition or installation of engineered stone products from non-licensed importers, manufacturers or fabricators of engineered stone products.

Recommendation 1

That a prohibition on the use of all engineered stone be implemented as a matter of priority. This prohibition is to apply to all engineered stone irrespective of the percentage of silica content.

Recommendation 2

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- **A robust, tripartite licensing regime is introduced that licenses both the importers, manufacturers and fabricators of engineered stone products. The regulatory regime should provide for significant penalties applying to the purchase, acquisition or installation of engineered stone products from non-licensed importers, manufacturers or fabricators of engineered stone products.**

In Situ or Legacy Engineered Stone

20. A prohibition on the use of engineered stone will however need to address what to do with the legacy product, i.e., the engineered stone already installed in buildings. This will require:

    a. an exemption for those companies and workers engaged in the handling, transport and any other activity associated with safely managing or removing engineered stone;

    b. the introduction of a national licensing scheme for any company/organisation involved in the handling, transport and any other activity associated with safely managing or removing in situ engineered stone; and

    c. a mandatory silica awareness training regime for workers who may be exposed to silica dust in the workplace when performing minor work such as installing new taps or new power points.

21. In regard to the exemption for companies and workers involved in safely managing or removing engineered stone this should not permit the installation of any new engineered stone product. It should be made abundantly clear to manufacturers, suppliers and fabricators that the stock piling of engineered stone for future installation will not be tolerated. The exemption is to only apply to engineered stone that is already installed.

22. The exempted work however should not be unregulated. There will need to be put in place a strict licensing scheme covering companies and the workers involved in safely managing and removing engineered stone. This licensing scheme should include mandatory requirements for training, registration of workers, regular health checks and providing adequate compensation for workers who succumb to work related health issues.

23. Training is already available for general silica awareness. There is a nationally accredited course *10830NAT Crystalline Silica Exposure Prevention*, which has been approved by ASQA, that is currently being used across Australia. There are also three units of competency that related to working with engineered stone that are now part of the Construction, Plumbing and Services Training Package. These units are: *CPCSIL2001 Use and maintain respiratory protective equipment*, *CPCSIL3001 Work*

with products and materials containing crystalline silica, and *CPCSIL4001 Supervise and manage work with products and materials generating respirable crystalline silica*.

24. The importance of having a register of workers with occupational dust diseases is well established. For example, NSW has its own NSW Dust Disease Register, managed by SafeWork NSW that includes information on workers diagnosed with silicosis, asbestosis and mesothelioma, and the Australian Government is establishing a National Occupational Respiratory Disease Registry (the **National Registry**) to record the nature and extent of occupational respiratory diseases in Australia. The bill is currently before the Federal Parliament and the revised legislation is expected to be introduced in the second half of 2023.[7] The CFMEU supports these types of registers but believes they should go further by recording all the workers engaged with engineered stone. This will make tracking an employee's work history much easier and assist in any future workers compensation claim.

25. Workers should also be entitled to regular health monitoring and silica screening to enable the early identification of any health issues.

26. Another important part of the licensing regime is ensuring that any injured worker or worker affected by a dust disease is adequately compensated if they can no longer work or are restricted in the work they can perform. Employers and companies engaged in using subcontractors should be required to provide proof of adequate workers compensation insurance and/or be required to contribute to a nationally established compensation scheme.

27. The CFMEU recognises that there will be some workers, such as plumbers and electricians who may have limited or irregular exposure to engineered stone products. These workers however may still be exposed to silica dust and must be made aware of the dangers and what precaution they must take. Indeed, this a requirement of the WHS legislation as s.19(3)(f) of the model *Work health and Safety Act 2011* requires that PCBU's must ensure, so far as reasonably practicable "*the provision of any information, training, instruction or supervision that is necessary to protect all*

[7] https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-dust-nat-registry.htm

persons from risks to their health and safety arising from work carried out as part of the conduct of the business or undertaking".

28. The CFMEU notes that some jurisdictions, such as the ACT, have already mandated silica awareness training for many occupations including electricians and plumbers.[8] This requirement should be made mandatory in all jurisdictions.

Recommendation 3

That any exemption for in situ engineered stone products be limited to the handling, transport and any other activity associated with safely managing or removing engineered stone.

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That a national licensing scheme be introduced for any company/organisation involved in the handling, transport and any other activity associated with safely managing or removing in situ engineered stone. Such licensing scheme should include:

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[8] See https://www.worksafe.act.gov.au/health-and-safety-portal/safety-by-industry/building-and-construction/silica-dust#:~:text=Occupations%20and%20tasks%20that%20can%20lead%20to%20exposure&text=The%20effect%20of%20the%20declaration,Prevention%20before%201%20July%202023.

Recommendation 5

That mandatory silica awareness training be required for all workers who may be exposed to silica dust in the workplace, including workers who perform minor work such as installing new taps or new power points in engineered stone products.