



Australian Government  
Department of Employment  
and Workplace Relations

# Prohibition on the use of engineered stone (OIA23-04892)

Impact Analysis Equivalent



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The document must be attributed as Prohibition on the use of engineered stone (OIA23 04892) Impact Analysis Equivalent.

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## Introduction

The Department of Employment and Workplace Relations (the department) considers the two independent processes led by Safe Work Australia (SWA) – the Decision Regulation Impact Statement: *Managing the risks of respirable crystalline silica at work* (Silica Decision RIS), and the Decision Regulation Impact Statement: *Prohibition on the use of engineered stone* (Prohibition Decision RIS) – can be relied upon to satisfy impact analysis requirements.

The Prohibition Decision RIS provides analysis of the impacts of options under the model work health and safety (WHS) laws to prohibit the use of engineered stone.<sup>1</sup> It builds on the evidence and analysis considered and set out in the Silica Decision RIS noting both documents are intended to be read together. Both these assessments have been prepared in accordance with the *Regulatory Impact Analysis Guide for Ministers' Meeting and National Standard Setting Bodies* and been assessed by the Office of Impact Analysis (OIA) as meeting the requirements set out in the Guide.

Additional analysis has been undertaken on the impacts associated with a further option to include border measures, such as a customs ban, to complement the prohibition on the use of engineered stone. This option seeks to address the same problem outlined in SWA's Prohibition Decision RIS, relating to the rise in the number of silicosis cases in workers in recent years, which are significantly over-represented by engineered stone workers. The two independent SWA processes did not scope the impacts on implementing complementary border measures as these assessments were limited to options for addressing the problem through the model WHS laws.

Complementary border measures, such as a customs ban, would not have significant additional impacts on businesses, workers or the economy because implementation would complement a prohibition on the use of engineered stone if agreed by a requisite two-third majority of WHS Ministers and adopted into jurisdictional WHS laws. The impacts on business, workers and consumers all flow from these WHS reforms. This is because a use prohibition on engineered stone would also have the effect of prohibiting the import of products under WHS laws. These laws provide that importers have a duty of care to ensure, so far as is reasonably practicable, that a product which will be used at a workplace is without risks to the health and safety of persons who would work with it. An importer would breach the duty of care importing a product which has been determined too unsafe to use in the way it is intended to be (i.e., fabricated).

Complementary measures at the border, such as a customs ban, will support the efforts of state and territory WHS regulators by providing an additional layer of enforcement and deterrence given engineered stone in Australia is predominantly supplied from overseas. In isolation, border measures like a customs ban would not address the problems associated with non-compliance when working with engineered stone. A customs ban was put in place by the Commonwealth in 2003 when asbestos was prohibited in Australia (Australia's asbestos prohibition is implemented through both WHS laws and a customs ban). A customs ban for engineered stone may be more targeted because asbestos is inherently dangerous to humans, whereas engineered stone does not pose a risk when not being processed.

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<sup>1</sup> The WHS model laws consist of the model WHS Act, model WHS Regulations and model Codes of Practice. To become legally binding the Commonwealth, states and territories must separately implement them as their own laws. The model laws have been implemented in all jurisdictions except Victoria. Some jurisdictions have made minor variations to make sure the legislation is consistent with their relevant drafting protocols and other laws and processes. <<https://www.safeworkaustralia.gov.au/law-and-regulation/model-whs-laws>>

## Overview of the Decision Regulation Impact Statement: Managing the risks of respirable crystalline silica at work

On 28 February 2023, SWA released the Silica Decision RIS which provides an analysis of the impacts of options, under the model WHS laws, to manage the risks of respirable crystalline silica (RCS) to improve the protection of the health and safety of workers.

The Silica Decision RIS was informed by an extensive consultation process, including a Consultation Regulation Impact Statement (CRIS) where SWA sought public comment on five regulatory and non-regulatory options to reduce workplace exposures to RCS in Australia. Submissions were received from governments, peak bodies, unions, employer or industry representatives, commercial enterprises, lawyers, insurance groups, academics, and individuals. As part of the feedback on the CRIS, unions, peak health bodies, and professional organisations called for a prohibition on the use of engineered stone. As a result of this feedback, an additional option to undertake further analysis and consultation on the impacts of the prohibition of use of engineered stone was included in the Silica Decision RIS. A copy of these options are at Appendix A.

On 28 February 2023, WHS Ministers considered the Silica Decision RIS and agreed to a nationally coordinated approach addressing this issue, including national awareness and behaviour change initiatives (Option 2) and implementing stronger regulation of high-risk RCS processes (Option 5a). WHS Ministers also agreed that SWA undertake further analysis and consultation on a prohibition of the use of engineered stone under the model WHS laws. The decisions of WHS Ministers were announced through a communique, available on the department's website.<sup>2</sup>

## Overview of the Decision Regulation Impact Statement: Prohibition on the use of engineered stone

On 16 August 2023, SWA circulated an embargoed copy of the Prohibition Decision RIS to WHS Ministers. Intended to be considered together with the Silica Decision RIS, the Prohibition Decision RIS examines the impacts of implementing a prohibition on the use of engineered stone through the model WHS laws, which would have the effect of a domestic ban on these products.

The Prohibition Decision RIS was also informed by extensive consultation based on three implementation options. These include:

Option 1	Prohibition on the use of all engineered stone
Option 2	Prohibition on the use of all engineered stone containing 40% or more crystalline silica
Option 3	As for Option 2, with an accompanying licensing scheme for PCBUs working with engineered stone containing less than 40% crystalline silica.

How each of the seven Impact Analysis elements were addressed by the two independent SWA processes is outlined below, with supplementary analysis provided relating to the impacts associated with complementary border measures, modelled on a customs ban on engineered stone.

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<sup>2</sup> Department of Employment and Workplace Relations, Communique – Work Health and Safety Ministers' Meeting – 28 February 2023, <https://www.dewr.gov.au/work-health-and-safety/resources/work-health-and-safety-ministers-meeting-28-february-2023>.

## Key terms

<b>ABF</b>	Australian Border Force
<b>CRIS</b>	Consultation Regulation Impact Statement
<b>DRIS</b>	Decision Regulation Impact Statement
<b>HSR</b>	Health and safety representative
<b>IAE</b>	Impact Assessment Equivalent
<b>NDDT</b>	National Dust Disease Taskforce
<b>PCBU</b>	Person Conducting a Business or Undertaking (see Section 5 of the <i>Model Work Health and Safety Act</i> )
<b>RIS</b>	Regulation Impact Statement
<b>RCS</b>	Respirable crystalline silica
<b>SWA</b>	Safe Work Australia
<b>WHS</b>	Work health and safety

## 1. What is the problem you are trying to solve and what data is available?

The Silica Decision RIS and the Prohibition Decision RIS undertook extensive research to scope the current problem of silicosis and silica-related diseases in the engineered stone industry. SWA conducted research and analysis from a wide range of sources, from regulator performance data to academic research. The two decision regulation impact processes also extensively engaged with stakeholders such as: businesses (including engineered stone wholesalers, fabricators and resellers); industry groups; unions; law firms; professional organisations; peak health bodies; Commonwealth, state and territory governments; and individuals. The results of these consultations – of which the submissions are publicly available – contributed to the final decision regulation impact statements.<sup>3</sup>

In addition to the evidence provided by these documents, the interim and final reports of the National Dust Disease Taskforce (NDDT) present a consistent overall view of the problems faced by the engineered stone industry.<sup>4</sup> The NDDT was established in 2019 to assist the development of a national approach for the prevention, early identification, control, and management of dust diseases in Australia. The Department of Health and Aged Care led this work. Some of the data presented by the NDDT is relied upon by the Silica Decision RIS and the Prohibition Decision RIS.

### The unique hazards of engineered stone

Engineered stone has been available in Australia since the late 1990s. It is an artificial product that contains high levels of crystalline silica (up to 97 per cent) along with other minerals, resins and pigments. The composite nature of engineered stone materials makes the emissions produced during processing of these products different from those produced when processing natural stone (e.g. granite and marble).

SWA commissioned the University of Adelaide to undertake a review and critical analysis of available evidence of the specific hazards associated with engineered stone. The review highlights the unique hazards associated with engineered stone that have likely contributed to the high rates of silicosis in engineered stone workers.

### Insufficient compliance with WHS model laws

Engineered stone workers have contracted silicosis and other silica-related diseases because they have not been adequately protected from exposure to RCS dust. This is the result of a failure of persons conducting a business or undertaking (PCBUs) to ensure the health and safety of workers, as required by WHS laws. Workers have also failed to take reasonable care for their own health and safety and ensure that their acts or emissions do not adversely affect the health and safety of others.

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<sup>3</sup> Safe Work Australia Engage, Consultation Regulation Impact Statement - Managing the risks of respirable crystalline silica, <https://engage.swa.gov.au/cris-managing-the-risks-of-respirable-crystalline-silica>;  
Safe Work Australia Engage, Consultation Regulation Impact Statement - Prohibition on the use of engineered stone, <https://engage.swa.gov.au/prohibition-on-the-use-of-engineered-stone>.

<sup>4</sup> The National Dust Disease Taskforce's interim and final reports are available on the Department of Health and Aged Care's website at: <https://www.health.gov.au/committees-and-groups/national-dust-disease-taskforce#:~:text=Findings%20and%20publications-Role,risk%20from%20occupational%20dust%20disease>.



Importers, suppliers and manufacturers of engineered stone products have failed to comply with their upstream duties to ensure these products are without risks to health and safety of the workers who will use the products. Most have not provided PCBUs with adequate information about the hazardous properties of the products and the controls necessary to ensure that the products are without risks to the workers' health and safety in the fabrication process.

Commonwealth, state and territory WHS regulators are responsible for the enforcement of WHS laws in their jurisdictions. Despite WHS regulators indicating that they have observed a general improvement in compliance in the engineered stone industry in recent years, data from WHS regulators indicates that non-compliance with WHS laws, relating to a broad range of regulatory duties, continues to occur in the engineered stone industry.<sup>5</sup>

## The nature of the engineered stone industry

Engineered stone has become the dominant benchtop material in Australia, commanding an estimated 55 per cent market share, due to a combination of factors including aesthetics, durability, price, and ease of processing.<sup>6</sup>

The nature of the engineered stone industry has arguably contributed to non-compliance, strongly contributing to the extent of cases of silicosis in the industry. In addition to the faster processing time of engineered stone, the ease with which this product can be fabricated means less skill is required to handle these materials compared to more brittle natural stone slabs and many workers in this industry do not have formal stonemason qualifications.

Many workers in this industry are from a culturally and linguistically diverse (CALD) background. CALD workers are at increased risk of occupational disease more broadly, and a recent case study of silicosis in engineered stone workers in California highlights this issue.<sup>7</sup>

The small size of many fabrication businesses (less than 20 employees) means they may also have less ability to invest in automation and other technology to minimise risks, with a resultant increase in the use of handheld tools, which is likely to lead to increased worker exposure to RCS.

The nature of the engineered stone industry and the associated workforce also means that some of the mechanisms in the model WHS laws that assist to better manage health and safety risks in workplaces were also less likely to be present. For example, there is unlikely to be a health and safety representative (HSR) or a health and safety committee at these workplaces. Where present, a

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<sup>5</sup> Department of Health and Aged Care, National Dust Disease Taskforce – Final Report, 30 June 2021. <https://www.health.gov.au/resources/publications/national-dust-disease-taskforce-final-report?language=en>; NSW Parliament, “2021 Review of the Dust Disease Scheme.” Legislative Council Standing Committee on Law and Justice, June 2022. <https://www.parliament.nsw.gov.au/tp/files/82197/Report%20No.%2080%20-%202021%20Review%20of%20the%20Dust%20Diseases%20Scheme.pdf>.

<sup>6</sup> Caeserstone submission to the Safe Work Australia Consultation Regulation Impact Analysis – Prohibition on the use of engineered stone.

<sup>7</sup> Hargreaves, S, K Rustage, L B Nellums, et al. 2019. “Occupational health outcomes among international migrant workers: a systematic review and meta-analysis.” *Lancet Glob Health* 7:e872–82; Fazio, J C, S A Gandhi, and J Flattery. 2023. “Silicosis Among Immigrant Engineered Stone (Quartz) Countertop Fabrication Workers in California.” *JAMA Internal Medicine*, Published online July 24, 2023. doi:10.1001/jamainternmed.2023.3295; Hua, J T, C S Rose, and C A Redlich. 2023. “Engineered Stone–Associated Silicosis - A Lethal Variant of an Ancient Disease.” *JAMA Internal Medicine*, Published online July 24, 2023. doi:10.1001/jamainternmed.2023.3260.

HSR or a health and safety committee can monitor compliance with the WHS laws and raise concerns about risks to health and safety in the business.

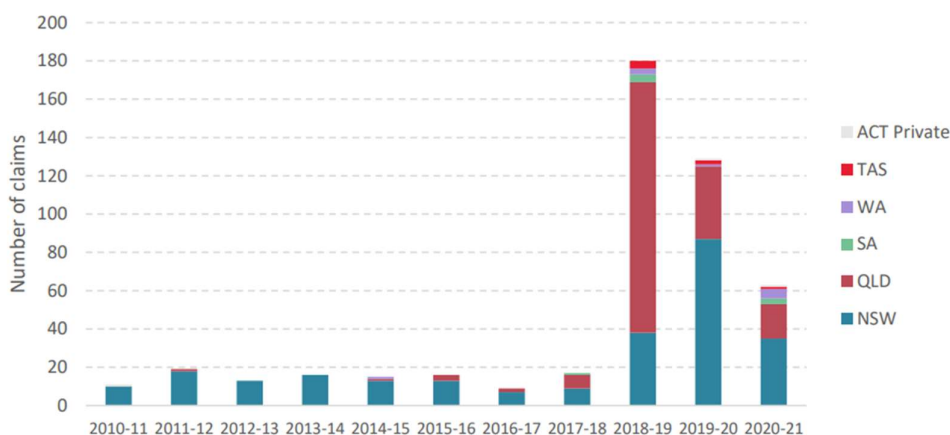
## Silicosis disease onset and profile differs in engineered stone workers

There has been a dramatic increase in cases of silicosis and silica-related disease in Australia in recent years, particularly in workers who have been exposed to silica dust from processing engineered stone. Engineered stone workers are over-represented amongst people diagnosed with silicosis.

Health screening programs carried out by state and territory WHS regulators and health authorities since 2018, have shown that of the 4,743 stonemasons and engineered stone workers screened, approximately 11 per cent received a probable or confirmed diagnosis of silicosis because of workplace exposure to RCS. There is also a suggestion that current case numbers, particularly in NSW, are an underestimation.<sup>8</sup>

The increase in workers' compensation claims seen from 2018–19 onwards, together with the concentration of these claims in the manufacturing sector coincides with concerted awareness raising and health screening efforts targeted at stone masons and engineered stone workers.

**Figure 1** Total number of accepted silicosis compensation claims in jurisdictions subject to the model WHS laws, 2010–11 to 2020–21<sup>P</sup>



Sources: Safe Work Australia's National Data Set for Compensation-based Statistics and icare.

## Engineered stone may continue to be knowingly, or unknowingly, brought into Australia

Regulatory failure has contributed to ongoing non-compliance with WHS laws concerning RCS exposure. Complementary border measures, such as a customs ban, could support the efforts of state and territory WHS regulators by providing an additional layer of enforcement and deterrence given engineered stone in Australia is predominantly imported in Australia.

<sup>8</sup> Cole, K F, D J Yates, and M Davidson. 2023. "Are we underestimating the prevalence of silicosis in the stone benchtop industry in New South Wales, Australia? Response to Hoy et al." Occupational and Environmental Medicine Rapid Response, published 28 June 2023 doi: 10.1136/oemed-2023-108892.

While a product may be heavily regulated or prohibited in Australia, this does not prevent persons from knowingly or unknowingly attempting to bring it into the country. Two examples of this are substances that mimic the effect of illicit drugs, and asbestos.

Despite asbestos being subject to a customs ban since 2003, each year the Australian Border Force (ABF) continues to detect asbestos in cargo arrivals. The manufacture and use of asbestos products is legal in a number of countries which manufacture products and export them to Australia. The difficulty in detecting asbestos products, coupled with their legality elsewhere, means it is not uncommon for products containing asbestos to arrive in Australia – often unknowingly. While the properties and uses of asbestos and engineered stone are different, there is a risk that without appropriate border measures in place, engineered stone may arrive in the Australian market illegally.

Prior to 2014, substances which mimic the effects of illicit drugs but whose chemical structures fall outside existing controls were marketed as ‘legal highs’ and imported to Australia. However, the ‘legal’ label was not always correct, as the substances were listed specifically as illicit drugs, or caught as analogues of other listed illicit drugs. In 2014 the Government implemented border measures to prohibit these substances from passing customs in order to prevent manufacturers from evading existing controls and provide the ABF with certainty to seize suspected illegal cargo arrivals. Once again, despite domestic prohibitions on the possession and manufacture of illegal products, the appropriate regulatory response was to complement existing measures with strict border controls.

A prohibition on the use of engineered stone under the model WHS laws will require importers to ensure defined goods are not imported into Australia. This IAE accepts that importers do not always comply with customs restrictions and domestic prohibitions either deliberately or unwittingly. The market for engineered stone is evolving which is likely to create instances where importers unlawfully import goods which they do not believe fit the definition of engineered stone. It is for this reason additional measures to complement state and territory enforcement activities should be investigated.

## **2. What are the objectives, why is government intervention needed to achieve them, and how will success be measured?**

The primary objective of government intervention is to reduce workplace exposure to RCS from engineered stone in Australia, with the aim of significantly reducing silicosis, a preventable disease, and other silica-related diseases in engineered stone workers.

Since 2011, there have been robust and consistent WHS laws in place requiring PCBUs, including designers, importers and manufacturers of engineered stone products, to eliminate or minimise the risks to workers and others from RCS, so far as is reasonably practicable, including RCS generated from use of engineered stone. There has been, and continues to be, non-compliance with the obligations imposed by WHS laws by both PCBUs and workers. Additionally, historically there has been insufficient compliance activities in respect of the engineered stone industry for the level of risk.

The increased risks posed by RCS from engineered stone, increased rate of silicosis diagnosis amongst engineered stone workers, and the faster and more severe disease progression amongst this group, combined with a multi-faceted failure of this industry to comply with the model WHS laws means that continued work with engineered stone poses an unacceptable risk to workers.

Success will be measured in the long term by a reduction or elimination in rates of silicosis and silica related disease in engineered stone workers. Following the decision by WHS Ministers in February 2023 to introduce additional regulations of high risk crystalline silica processes, which included additional reporting requirements, RCS exposures will be measured by reviewing the air and health monitoring data provided to WHS regulators. Workers' compensation claims data, jurisdictional screening programs and dust disease registers will continue to be monitored to evaluate the impact of the prohibition. Once operational, the National Occupational Respiratory Disease Register (establishing legislation is currently before the Parliament) will be relied upon in place of the state dust disease registry.

SWA will monitor emerging engineered stone-like products and make recommendations to WHS Ministers on effective ways to manage these risks. This will be undertaken as part of SWA's broader functions in monitoring and evaluating the model WHS laws and facilitating WHS compliance. The Asbestos Safety and Eradication Agency would also play a role in coordinating, monitoring and reporting on jurisdictional actions relating to silica, subject to proposed amendments to expand the Agency's role to silica, set out in the Fair Work Legislation Amendment (Closing Loopholes) Bill 2023 currently before the Parliament.

### **3. What policy options are you considering?**

#### **Option 1: Prohibition on the use of engineered stone**

The Prohibition Decision RIS effectively explored the impacts associated with a prohibition on the use of engineered stone, noting this was identified as the recommended option. A prohibition on the use of engineered stone would be similar to, but not the same as, that for asbestos (as per Chapter 8 of the model WHS regulations). It would be enforced through state and territory WHS laws and would apply to any product meeting the definition of engineered stone in the model WHS Regulations. Continued use of products previously installed, as well as minor modifications and removal would be permitted.

Under the recommended option in the Prohibition Decision RIS, businesses wanting to undertake exempt work with engineered stone already in place would require a licence (or similar) for work with legacy products. The Prohibition Decision RIS identifies the licensing framework for work with legacy products proposed is largely an administrative framework that ensures regulators are aware of which businesses are undertaking this work. This is because existing regulations, including the prohibition of uncontrolled processing of engineered stone; and the additional requirements agreed for Option 5a of the Silica Decision RIS (including requirements for risk control plans, training, air and health monitoring, and reporting) would already apply and no additional regulations are proposed.

## Option 2: Prohibition on the use of engineered stone with complementary border measures (preferred)

The preferred option in this IAE, is to prohibit the use of engineered stone (consistent with Option 1 above) but complement this measure with border measures, such as a customs ban through customs legislation. Border measures would complement a decision of WHS Ministers to a use prohibition in WHS laws. Complementary border measures in isolation are not being considered because it would not prevent engineered stone being manufactured and fabricated domestically. They also would not address the long-term and persistent lack of compliance with WHS laws in the engineered stone industry, which is a key factor driving the increase in occupational silicosis cases in recent years.

Complementary border measures would provide an additional layer of enforcement and deterrence. A customs ban for example, would see the ABF responsible for identifying prohibited products before they reach workplaces and compliance and enforcement activities. Because border measures, such as a customs ban are intended to complement the work of state and territory WHS regulations which are yet to be developed, further detail on these measures will be resolved at a later date. This includes testing requirements, should they be necessary.

## Option 3: Status quo

The risks of RCS exposure would be managed through the existing WHS framework. It assumes compliance and enforcement activities of WHS regulators, and education and awareness activities undertaken by SWA; Commonwealth, state and territory governments; and non-government organisations would continue at current levels.

## 4. What is the likely net benefit of each option?

**Table 1: Breakdown of estimated costs for each option over the 10-year appraisal period (\$m)<sup>9</sup>**

	Option 1	Option 2	Option 3
<b>Licensing framework for work with legacy products</b>			
Cost to PCBU's	\$133.0	\$133.0	\$0
Cost to government	\$107.5	\$107.5	\$0
<b>Sub total</b>	<b>\$240.5</b>	<b>\$240.5</b>	<b>\$0</b>
<b>Option-specific costs</b>			
Cost to PCBU's	\$6.9	\$6.9	\$0
Cost to government	\$0.7	\$0.7	\$0
Cost to workers	\$3.1	\$3.1	\$0
<b>Sub total</b>	<b>\$10.6</b>	<b>\$10.6</b>	<b>\$0</b>
<b>Total</b>	<b>\$251.1</b>	<b>\$251.1</b>	<b>\$0</b>

<sup>9</sup> These figures are the same as those provided in the SWA Decision RIS: *Prohibition on the use of engineered stone*. They are rounded to the nearest \$0.1 million.

## Option 1: Prohibition on the use of engineered stone

### For businesses

#### Costs

The Prohibition Decision RIS identified the primary business cohorts impacted by Option 1:

- Engineered stone PCBU's which fabricate (i.e. cut, shape, polish) and install new engineered stone as their primary activity.
- Other industry PCBU's which, in the course of their primary activities, may work with engineered stone that has previously been installed (legacy engineered stone). For example, cutting an existing benchtop to fit an electrical outlet, replacing a cooktop, repairing or modifying plumbing, or removing a benchtop.

Additionally, the Prohibition Decision RIS also identified a small number of other impacted PCBU's including importers, distributors and wholesale businesses, noting these were not quantitatively costed due to the lack of information. A 2019 report suggested that 77 per cent of Australia's engineered stone of Australia's engineered stone was supplied by 3–4 companies.<sup>10</sup> One major manufacturer and wholesaler, Caesarstone, estimates there are about 12 importers in the Australian market including Caesarstone, Smartstone and Cosentino.<sup>11</sup>

While it is not possible to determine exact numbers, it appears that up to 4 of these supply companies are large multi-national companies who also manufacture engineered stone and other stone or stone-like products. The remainder are locally owned companies who import engineered stone from overseas manufacturers. Based on the limited information available, it appears that the companies importing and supplying engineered stone do not undertake fabrication themselves.

SWA assumes that no engineered stone PCBU's work with legacy engineered stone, and no other industry PCBU's fabricate or install new engineered stone.<sup>12</sup>

#### Prohibition impact

SWA estimate there are 750 to 1,250 PCBU's working with engineered stone in Australia. Under Option 1, it is assumed that 10 per cent of sole traders, 10 per cent of small businesses and 5 per cent of medium businesses would exit the industry due to a prohibition on the use of all engineered stone. Of the engineered stone PCBU's who responded to the SWA consultation on the prohibition consultation options, 95 per cent indicated they also work with natural stone, meaning the transition to work with natural stone would likely have less impact than previously assumed.

Business closure costs (e.g. financial wind up or liquidation costs) and redundancy payments paid to workers have been estimated at \$4.8 million across all engineered stone PCBU's for Option 1.

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<sup>10</sup> Australian Engineered Stone Advisory Group 2019, Application for authorisation to the Australian Competition and Consumer Commission (ACCC), <<https://www.accc.gov.au/system/files/public-registers/documents/Australian%20Engineered%20Stone%20Advisory%20Group%20%28AESAG%29%20-%20Application%20Received%20-%2029.11.19%20-%20PR%20VERSION.pdf>>.

<sup>11</sup> Caesarstone submission to the Safe Work Australia Consultation Regulation Impact Analysis – Prohibition on the use of engineered stone.

<sup>12</sup> A comprehensive analysis of these cohorts is set out in Appendix B.3 and B.4 of the Prohibition Decision RIS.

Redundancy costs have been assumed to be paid only by medium businesses, with displaced workers from smaller businesses eligible for government income support.

Under Option 1, it is assumed that most engineered stone PCBUs would continue to work with natural stone, but a small number (5 per cent) of medium sized engineered stone PCBUs may choose to expand their business to include non-stone products. This would result in new equipment costs of \$2.1 million over 10 years.

Medium sized PCBUs are assumed to be more able to expand their offering to include non-stone products than sole traders and small businesses, as they are expected to have better access to the capital required to invest in new equipment, processes and training, and may already be undertaking work with alternative products such as laminate.

Importers have a duty of care under WHS laws to ensure, so far as reasonably practicable, that a product which will be used at a workplace is without risks to the health and safety of workers using it. A prohibition on the use of engineered stone would impact importers as their duty of care would mean they could not bring into Australia a product which has been determined too unsafe to use.

### Licensing

There is an estimated 179,750 other industry PCBUs currently assumed to do some work with engineered stone in the course of their primary activities.<sup>13</sup> It was assumed in the Prohibition Decision RIS, that 30 per cent of other industry sole traders, 35 per cent of small businesses and 40 per cent of medium to large businesses would choose to acquire a licence to work with previously installed engineered stone (under the licensing framework for work with legacy products). Costs include those administrative costs associated with applying for and renewing a licence and participating in compliance inspections. These have been estimated to be up to \$133.0 million over 10 years.

Given that working with engineered stone is not likely to be the primary activity of other industry PCBUs, it is expected that only a very small number of these PCBUs would cease operating as a result of Option 1. Therefore, no business closure or redundancy costs have been estimated for other industry PCBUs.

### Benefits

Benefits of a prohibition on the use of engineered stone are avoided costs associated with workers compensation claims and higher insurance premiums, and an increase in productivity in the relevant industry workforce.

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<sup>13</sup> Safe Work Australia, Decision Regulation Impact Statement – Prohibition on the use of engineered stone, Table 21.

## For workers

### Costs

The impacts on workers of Option 1 are identified in the Prohibition Decision RIS and are estimated to be \$3.1 million over 10 years.

The Prohibition Decision RIS estimates the cost to workers as \$2.9 million, covering the difference between average wage in this sector and current Jobseeker payments for the displaced workers from those sole trader and small business PCBU that close as a result of a prohibition. The cost is calculated based on a worker receiving Jobseeker for an 8-week period. This is mitigated by the assumption that any periods of unemployment will be minimal given the tight labour market in the construction sector and that underlying demand for bathroom and kitchen benchtops and surfaces is not expected to change.

It also estimates re-training costs as \$0.2 million over 10 years, based on average course fees for a Certificate III qualification for Civil Construction, Cabinet Making, Tiling and Fabrication Trades, for the 3 per cent of displaced workers from PCBU closures who are assumed to re-train.

### Benefits

The direct benefit from a prohibition on the use of engineered stone is an improvement to health and quality of life outcomes for those who work with engineered stone products, which are challenging to assess quantitatively. This would be accompanied by an indirect benefit to the wellbeing of their family, friends and community.

## For Government

### Costs

The Prohibition Decision RIS identified the total cost to Commonwealth, state and territory governments of Option 1. The cost is estimated to be up to \$108.2 million over 10 years. These costs identified for the preferred option (a use prohibition) in the Prohibition Decision RIS include the provision of income and vocational training support for displaced workers (\$0.7 million over ten years) and the implementation of a licensing framework for work with legacy products (\$107.5 over ten years). There will also be a minor impact on import tariff revenue.

### Benefits

A prohibition on the use of engineered stone will see governments avoid the costs associated with hospitalisations and outpatient care, as well as broader community benefits resulting from improved health benefits.



## Option 2: Prohibition on the use of engineered stone with complementary border measures (preferred)

### For businesses

#### Costs

Option 2 assumes the same costs in Option 1 associated with a prohibition on the use of engineered stone (\$133.0 million for licensing costs and \$6.9 million for other costs over 10 years). This assumption is based on the following:

- There would be no demand for the importation of international products which are prohibited from use in Australian workplaces. Impacts on importers of engineered stone products would be primarily derived from the prohibition on use under WHS laws.
- A use prohibition would have the effect of an import ban on engineered stone products under WHS laws. A PCBU importing substances for use in a workplace must ensure, so far as is reasonably practicable, that the substance is safe for use by workers (section 24 model WHS Act). An importer would breach this duty of care by importing a substance which has been prohibited from use in workplaces, because of the health and safety risk posed to workers.

There may be costs for importers of products similar to engineered stone but this will need to be assessed when the use prohibition in the model WHS law and the scope of complementary border measures are settled. Importers may have consignments with products similar to engineered stone held under suspicion at customs which could cause supply chain disruption to stone fabricators and the building industry. In the case of a customs ban for example, the potential for uncertainty would depend on the definition of engineered stone which is adopted in the customs legislation, which may be narrower than the definition in the model WHS regulations and linked to prohibiting materials designed for fabrication.<sup>14</sup> This uncertainty is most likely to occur when importing goods from international suppliers, like natural stone or artificial materials, which may resemble prohibited engineered stone. In some cases where products cannot be identified, importers may be required to pay for independent third-party testing. Costs to importers in this instance may include sampling, testing, and storage for goods held by Customs until they are tested by third parties. This may also include delays at the border having a flow on effect to other businesses. Costs for importers would also be dependent on requirements stipulated by immigration and ABF.

#### Benefits

A complementary border measure like a customs ban benefits fabricators and installers (compared to Option 1) by providing a higher degree of certainty that the product that they are using is not prohibited for use. This certainty will increase over time as engineered stone products are removed from domestic stocks.

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<sup>14</sup> *Model Work Health and Safety Regulations*, regulation 184A(3).

This option also assumes businesses will experience the same benefits related to avoided costs and workplace productivity associated with the prohibition on engineered stone.

### For workers

Option 2 assumes the same costs and benefits for workers as in Option 1. Complementary border measures targeting engineered stone are likely to have the effect of reducing the likelihood of workers fabricating or installing engineered stone sooner, and reducing the chance of unknowingly working with it in the future in instances where it is unlawfully imported.

### For Government

Option 2 assumes the same costs related to a licensing framework for use with legacy products, income support and vocational training for displaced workers described in Option 1 (\$108.2 million over 10 years).

Complementary border measures have impacts associated with resourcing of ABF compliance efforts. The ABF has noted that its role and function in operationalising border control includes targeting of goods and engagement offshore, storage pending testing, seizure, and potential disposal. Engineered stone carries less inherent risk than other prohibited goods like asbestos and illicit drugs noting it does not pose risks unless it is being cut or ground. If disposal is required, engineered stone products will likely be treated as trade waste.

This option may also have a minor impact on tariff revenues.

## **Option 3: Status Quo**

### For businesses

Option 3, the status quo, does not entail monetised costs and only requires businesses to comply with WHS laws. The benefit for engineered stone businesses is that they will be able to carry on business as usual with their primary material of use and without the need to transition to other materials.

The impacts over the medium and long term will be increased workers' compensation premiums, likely heavier regulatory targeting of their industries and a decline in the physical wellbeing of their workforces. The nature of the engineered stone industry means that there is likely to be continued non-compliance with the WHS model laws.

### For workers

There are clear health and wellbeing disadvantages to workers continuing to work with engineered stone. Workers in the engineered stone sector are disproportionately being diagnosed with silicosis and silica-related diseases and will continue to do so until the risk of RCS as a result from working with engineered is eliminated.

Insufficient compliance with WHS laws at all levels of the supply chain casts doubt on whether tighter regulation will remove the risk, and evaluating the effectiveness of this regulation is affected by the significant time lag between RCS exposure and silicosis diagnosis.

## For Government

Option 3 is the status quo option and does not entail any additional monetised costs. The ongoing fabrication and installation of engineered stone on the current scale will see an increasing number of workers develop silicosis and other silica-related diseases which will have long-term, ongoing implications for health systems.

## 5. Who did you consult and how did you incorporate their feedback?

Consultation on a prohibition on the use of engineered stone and on addressing the risks of silica more broadly was extensively undertaken at the Commonwealth level and is subject to three key consultative processes outlined below. These processes incorporated a wide range of views, from unions, industry groups, health bodies as well as individual employers and workers.

### **The Consultation Regulation Impact Statement: Managing the risks of respirable crystalline silica at work**

The Silica Decision RIS incorporates feedback from consultation conducted in two stages:

- preliminary consultation via workshops and individual consultation with key stakeholders to inform the Consultation Regulation Impact Statement: *Managing the risks of respirable crystalline silica at work* (CRIS), and
- public consultation on the CRIS.

#### Preliminary consultation

Preliminary consultations were held with a range of stakeholders including WHS regulators, industry peak bodies, employee representatives, employer representatives and health organisations. The consultation consisted of 3 workshops and 4 discussions with individual organisations. In total 24 stakeholders were invited to participate in the consultations, with representatives from 23 stakeholders taking part.

Stakeholder feedback informed the drafting of the Silica Consultation RIS, including development of the problem statement and evidence base, and the options. Stakeholders provided information such as quantitative data, reports and peer-reviewed papers to inform this process.

#### Public consultation

SWA sought feedback on the CRIS. The CRIS outlined specific consultation questions relating to the problem statement, proposed options and impact analysis. A total of 67 submissions were received from a range of stakeholders, including:

- Commonwealth, state and territory government departments
- peak health bodies
- industry groups
- unions
- commercial enterprises including engineered stone suppliers
- lawyers
- insurance groups
- academics, and
- individuals.

There was clear support for further government intervention to reduce the risks of RCS exposure at work. Only a small number of businesses and industry groups argued the existing regulations are adequate to address the need. Stakeholders were supportive of the objectives of government intervention.

## **SWA consultation on the prohibition on the use of engineered stone**

This Prohibition Decision RIS was informed by a consultation process that SWA ran from March–April 2023. The Agency sought feedback on a consultation paper outlining 3 options, which included:

- Option 1: Prohibition on the use of all engineered stone
- Option 2: Prohibition on the use of engineered stone containing 40% or more crystalline silica, and
- Option 3: 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.

The consultation paper asked stakeholders to provide data and evidence to support their preferred options and to inform the impact analysis. Stakeholders were also asked to submit any evidence to support a “threshold” level of crystalline silica below which engineered stone can be worked with safely.

A total of 114 submissions were received from a range of stakeholders, including:

- PCBUs working with engineered stone (60, including four engineered stone suppliers)
- other PCBUs, including law firms (11)
- industry groups (8)
- professional organisations and peak health bodies (6)
- Commonwealth, state and territory government departments and agencies (6)
- unions (5), and
- individuals, including WHS and medical professionals and individuals who work with stone (18).

The consultation paper sought specific information from businesses working with engineered stone to inform the impact analysis. This included business size, workforce data, revenue and proportion of work carried out with engineered stone (with varying silica content) and natural stone products. The provided data highlights that the vast majority of these PCBUs work with both engineered stone and natural stone, which differs from the assumption made in the preliminary considerations of the impacts of a prohibition on use of engineered stone in the Silica Decision RIS.

## Consultation through the National Dust Disease Taskforce

The NDDT undertook a series of consultations from mid-2019 to mid-2021 to seek input from a wide range of stakeholders as part of its work to develop a national approach for the prevention, early identification, control, and management of dust diseases in Australia. There was a high level of similarity and agreement on the issues identified across the various consultation phases. A number of research projects were also conducted into dust diseases in general and silicosis in particular.

Phase 1 of consultation received 69 responses, and 146 individuals attended forums in Adelaide, Brisbane, Canberra, Hobart, Melbourne, Perth and Sydney. The findings of these consultations contributed to the Interim Advice provided to the Minister for Health.

Phase 2 consultation collected feedback on the NDDT's Interim Report published on 20 December 2019, and further investigated a number of key areas identified by the NDDT - 38 stakeholder submissions received, and 11 stakeholder consultations were conducted.<sup>15</sup>

Consultation on the NDDT's draft vision, strategies and priority areas for action commenced on 30 April 2021 with the dissemination of a consultation paper to key stakeholders. There were 22 submissions received from WHS regulators, unions, peak bodies, industry, legal firms, researchers and health agencies.

The NDDT convened a research-focused workshop in November 2019 to identify research needed to better understand and respond to the emergence of silicosis. It brought together leading Australian researchers in the fields of diagnosis and management of silicosis. Workshop participants identified key research areas as epidemiology, prevention, early diagnosis, underlying pathology and management.

The NDDT delivered its final report to the Minister for Health on 30 June 2021.<sup>16</sup> The work of the NDDT was assumed into SWA's Silica Decision RIS and Prohibition Decision RIS. Of particular note is the NDDT's recommendation for an importation prohibition by July 2024, which was incorporated into the preferred policy option in this IAE. In summarising its consultation, the NDDT noted:<sup>17</sup>

Unions, occupational hygienists, and one medical professional are particularly vocal about the risk of allowing products into the country as importation marks the first tick of approval that the product is fit for handling. Restricted importation and distribution, coupled with enforceable repercussions for misconduct or in compliance would help close the gap on hazardous products making it into the hands of workers.

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<sup>15</sup> Department of Health, National Dust Disease Taskforce – Interim Report, 20 December 2019.

<https://www.health.gov.au/resources/publications/national-dust-disease-taskforce-interim-advice-to-minister-for-health?language=en>

<sup>16</sup> Department of Health, National Dust Disease Taskforce – Final Report, 30 June 2021.

<https://www.health.gov.au/resources/publications/national-dust-disease-taskforce-final-report?language=en>

<sup>17</sup> Department of Health, National Dust Disease Taskforce – Research Synthesis, 21 February 2021.

<https://www.health.gov.au/resources/publications/national-dust-disease-taskforce-consultation-synthesis?language=en>

## 6. What is the best option from those you have considered and how will it be implemented?

A prohibition on the use of engineered stone with complementary border measures (Option 2) is the best option to address the problem statement and protect workers from silicosis and silica-related diseases as a result of exposure to RCS in the engineered stone sector.

Border measures, such as a customs ban, would not have significant additional impacts on businesses, workers or the economy because it is intended to be complementary to a prohibition on the use of engineered stone being agreed by WHS ministers and adopted into jurisdictional WHS laws. Any impacts unique to a border measures would be primarily felt by the Commonwealth Government, which is responsible for customs compliance and enforcement. There may be minor impacts on importers and their associated supply chains when suspected engineered goods are held at the border. However, these impacts are outweighed by the benefits that the assurance complementary border measures ban will have.

This IAE assumes any complementary border arrangements would be implemented similarly to how the arrangements for asbestos, via amendments to the *Customs (Prohibited Imports) Regulations 1956* (the Prohibited Imports Regulations). Consideration would need to be given to the need for any necessary exemptions. For instance, asbestos exemptions include a permit system administered by the Asbestos Safety and Eradication Agency for research, analysis or display purposes. To give effect to the any complementary border measures, such as a customs ban, ABF would establish a risk-based framework to monitor and enforce compliance at the border. ABF advised the Department that consideration may need to be given to developing a testing standard, noting however that SWA's use prohibition did not contemplate a testing standard to assist enforcement of the use prohibition.

To give effect to the prohibition on the use of engineered stone in Option 2, the model WHS Regulations would be amended to introduce a prohibition on the use of all engineered stone, with exemptions for certain work on previously installed stone. For the amendments to the model WHS Regulations to apply, each jurisdiction will need to implement them separately through amendments to their jurisdictional WHS Regulations. To avoid asynchronous implementation of the changes across jurisdictions a date of implementation will need to be considered.

SWA would develop communications and guidance materials to assist stakeholders to understand how the amendments to the model WHS Regulations affect them. These materials could be developed prior to the amendments being finalised, to assist stakeholders in their preparations. Post-commencement, SWA would monitor emerging engineered stone-like products and make recommendations to WHS Ministers on effective ways to manage these risks. This would be undertaken as part of SWA's broader functions in monitoring and evaluating the model WHS laws and facilitating WHS compliance. The Commonwealth may be able to support coordination and monitoring activities through the proposed expanded role of the Asbestos Safety and Eradication Agency set out in the Fair Work Legislation Amendment (Closing Loopholes) Bill 2023, currently before the Parliament. The Bill seeks to expand the Agency's functions to monitor and report on jurisdictional activities in relation to silica and to support national education and awareness-raising activities.

## **7. How will you evaluate your chosen option against the success metrics?**

### **Reducing exposure to RCS in engineered stone workers**

Following the decision by WHS ministers in February 2023 to introduce additional regulations of high-risk crystalline silica processes, including requirements for air and health monitoring, RCS exposures in these workers will be measured by reviewing the air and health monitoring data provided to WHS regulators. RCS exposures in these workers will also be measured by reviewing relevant jurisdictional compliance and enforcement data.

### **Silicosis cases**

Currently, there are several data sources for silicosis cases – accepted workers’ compensation claims, jurisdictional health screening programs, and state-based dust disease registers. These will continue to be monitored to evaluate the impact of the preferred option on reducing silicosis cases. Once operational, the National Occupational Respiratory Disease Register, which will mandate the reporting of all diagnosed silicosis cases in Australia, will be relied upon in place of the state dust disease registries.

### **Continued review of emerging products**

SWA will continue to review and assess the risk profile of emerging products. This includes products not currently covered by the definition of engineered stone, such as porcelain, ceramic, and engineered stone-like products that contain amorphous silica (recycled glass), feldspar or other products in place of crystalline silica. As appropriate, SWA will make recommendations to WHS Ministers on effective ways to manage risks posed by these products.

### **Customs and imports**

ABF import data can appraise Government of the extent to which importers are attempting to import engineered stone products after their prohibition. Where appropriate, this data could be used to measure import trends and provide information to state and territory regulators if required.

### Options from the Decision Regulation Impact Statement: Managing the risks of respirable crystalline silica at work

Option 1	Base Case
Option 2	National awareness and behaviour change initiatives
Option 4*	National licensing framework for PCBUs working with engineered stone
Option 5a	Regulation of high risk crystalline silica processes for all materials, including engineered stone
Option 5b:	Regulation of high risk crystalline silica processes for all materials other than engineered stone
Option 6	Further analysis and consultation on the impacts of the prohibition of use of engineered stone should be undertaken

\*Following feedback received from public consultation, Option 3, clarifying the existing requirements of the model WHS laws for high risk silica processes, was removed and Option 5a was refined to include elements of Option 3, which focused on clarifying the existing requirements under the model WHS laws.