12 December 2024

Safe Work Australia
GPO Box 641
CANBERRA ACT 2601
Via consultation hub: https://consult.swa.gov.au/wel-consultation

CONSULTATION PAPER: IMPACT ANALYSIS OF THE PROPOSED WORKPLACE EXPOSURE LIMITS FOR 9 CHEMICALS (CONSULTATION PAPER)

Thank you for the opportunity to comment on the Consultation Paper. The focus of CMPA's submission is on Respirable Crystalline Silica (RCS) (mining industry) as differentiated in the Consultation Paper and with reference to the related but lower risk quarry sector.

Submission

- Construction and demolition (C&D) waste recycling should also be included due to processing construction materials using the similar processes as quarrying (and often located at quarry sites due to Government requirements for recycled content blended with raw products) thereby incurring similar costs (in part).

- That the frequency for medical assessments be conducted every two years at a minimum for the quarry and C&D waste recycling sector.

- Time Weighted Average (TWA) Workplace Exposure Standard (WES) of 0.05 mg/m^3 be retained for RCS:

    - Safe Work Australia silicosis claims for the quarry industry have been trending downwards from the year 2000 when excluding claims from the manufactured stone industry.

    - Efforts by employers have reduced with time the level of RCS exposure in the quarry and C&D waste recycling sectors demonstrated by most RCS personal monitoring data supplied by CMPA Members being below the current workplace exposure standard (WES) of 0.05 mg/m^3.

    - RCS employee personal monitoring data point to accelerated silicosis **not** occurring within the quarry and C&D waste recycling sectors.

- Given the uncertainties around measurement at levels lower than 0.05mg/m^3, any exceedances to 0.05 mg/m^3 should trigger investigation of the sources of exposure and implementation of suitable control strategies as well as health monitoring.

Conclusion

Option 1 supported by CMPA: to retain the current TWA WES of 0.05 mg/m^3 for respirable crystalline silica for quarry and C&D waste recycling sectors.

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Discussion

Silicosis Claims

The Safe Work Australia statistical data for claims for silicosis demonstrate that the accepted cases for silicosis for the extractive industry have generally been decreasing from 2000, nationally (excluding where bagging of milled sand is undertaken in an enclosed space) see Appendix B.

It is understood that union officials may have their own agenda that appears to be beyond what is practicable or necessary for protection of the health of employees in the quarry/C&D waste recycling industry. This proposed halving again of the WES/Workplace exposure limit (WEL) may well lead to the closure of the extractive industry and thereby the construction industry (240,000 employees just in Victoria).

Workplace Exposure Standard /Workplace Exposure Limit

The Australian Institute of Occupational Hygienists (AIOH) recommends limiting worker exposure to RCS to as low as reasonably practicable (ALARP) to always be below an 8-hour time weighted average (TWA) guidance exposure value of 0.05 mg/m^3. (AIOH RCS and Occupational Health Issues Position Paper 18 November 2024).

CMPA Members' RCS personal monitoring data (2014-2023) from quarries and C&D waste recycling has undergone a preliminary review by Dr Amanda Sillcock, Occupational Physician and demonstrated that:

- the readings on most of the samples were below the current WES of 0.05 mg/m^3
- those that were higher were mainly older samples from earlier years
- this would suggest that there have been successful efforts to reduce the level of RCS exposure
- much of the work in quarries is performed outdoors so the risk is lower than for workers employed in enclosed spaces or working with manufactured stone

There is clear evidence that cases of accelerated silicosis are not occurring in the quarry and C&D waste recycling sectors as has been happening with manufactured stone.

This is distinct from what has been occurring with the manufactured stone sector and potentially the tunnel boring sector of the construction industry. The current evidence is that most, if not, all the recent/current cases are due to working with manufactured stone material rather than in the open-air quarry and C&D waste recycling sectors.

Periodic medicals

It is proposed that periodic employee medicals be conducted at a minimum of every two years for the quarry and C&D waste recycling sectors due to a lack of cases of accelerated silicosis in these sectors.

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Uncertainties in Measurement of RCS

Given the uncertainties (Australian Institute of Occupational Hygienists, AIOH) around measurement at levels lower than 0.05mg/m^3, setting a trigger level (normally half of the WES) is not supported by CMPA. Any exceedances to 0.05 mg/m^3 should trigger investigation of the sources of exposure and implementation of suitable control strategies as well as health monitoring.

Costs

It is noted that in the Consultation Paper, RCS has been separated into two categories:

1. RCS (excluding mining industry)
2. RCS (mining industry)

This is due to the magnitude of incremental costs (WES 0.05 mg/m^3 being halved to WEL 0.025 mg/m^3) being vastly greater for the mining industry. Additionally, the impact on the financial viability of the affected quarry/C&D waste recycling sectors would be far greater than the higher value export mining industry due to being a high-volume low-value local consumption model.

The estimated total compliance costs due to the proposed WEL of $18.7 billion is ~700% greater than the total benefits of $2.5 billion. The percentage is expected to be underestimated due to low average business cost being given for small operations thereby detrimentally affecting their financial viability. Note small quarries are generally located in rural and regional areas servicing local construction material needs by providing a competitive market of quality, rock/product type and price.

For RCS (excluding mining industry) the percentage is ~-80%.

Specific Comments

Page number	Consultation Paper	CMPA comments
P.46 2nd dot point 1st circle point	(*including conveyor guards, transfer curtain, stockpile covers, water dust suppression, machine cab filtration, and HEPA vacuums and filters*).	Note that some of the controls listed, such as stockpile covers, are impracticable and introduce additional safety hazards.
P.46 2nd dot point 2nd circle point	(*including annual medical assessments, medical x-rays and lung cancer screenings, ongoing health monitoring, respiratory protective equipment (RPE) fit testing and staff training*)	No mention is made of the increased danger of exposure to radiation by undertaking assessments annually instead of biannually.

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p.47 Table 24		The total cost for the middle column (less Management practice costs) comes to $3067.7 millions i.e. not $3047.6 millions.

From a practical point of view and due to the alarming, manufactured stone saga, public perception and overreaction may lead to unforeseen events such as a call for surfacing of all unsealed roads in Australia.

I would be pleased to discuss these matters with you. Please contact me on 0434 692 618 or via email at elizabeth.gibson@cmpavic.asn.au in respect of any matter.

Yours sincerely

EM Gibson

Dr Elizabeth Gibson
General Manager

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Inc. No. A0039304E | ABN 85 154 053 129

Appendix A

About CMPA

The Construction Material Processing Association (CMPA) is the premier representative body for the Victorian heavy construction material industry. It represents a broad spectrum of those involved in construction material processing including construction and demolition waste recycling businesses and has a membership base consisting of over 220 quarries across the industry. Together, these Members employ approximately 2000 Victorians which underpins the construction industry of almost 240,000 employees (https://liveinmelbourne.vic.gov.au/connect/victorian-industries/transport-defence-and-construction).

CMPA members are typically small to medium sized family, and private businesses, local government, utility providers and national companies. Many are regionally based employers and service local construction, infrastructure, and road maintenance needs. The extractives sector is a key pillar within the construction industry underpinning the growth and economic development of Victoria through supply of the construction materials.

In 2022/23, the sector supplied approximately 72 million tonnes of construction materials and 7 million tonnes of recycled construction and demolition waste (25% of total freight movement in Victoria) to the market, at a value of approximately $1.4 billion directly supporting Victoria's $80 billion Big Build (https://bigbuild.vic.gov.au/about) and the estimated 1.6 million new homes required by 2050 (https://earthresources.vic.gov.au/geology-exploration/industry-investment/ joint-ministerial-statement-on-extractive-resources). Small to medium quarries account for approximately half of this production and is submitted to be a vital industry supporting the ongoing economic prosperity of Victorians. An additional 6.5 million tonnes of recycled construction and demolition waste was also produced.

The CMPA supports the principle of responsible, balanced legislation that is in the best interests of the State of Victoria and Australia.

CMPA is very much aware (historically records reports silicosis in quarrying in ancient times) of respirable crystalline silica (RCS) and the potential adverse impact on employees' health and has been instrumental in raising this issue and subsequently compliance among Members through:

- CMPA pre-employment health assessment proforma;
- CMPA periodic health assessment proforma;
- CMPA silica specific periodic health monitoring
- CMPA exit employment health assessment proforma;
- CMPA instructions for medical practitioners;
- CMPA Respirable Crystalline Silica Dust Management Guideline Issue 2 2022;
- CMPA On-line silica awareness training module for employees;
- CMPA Respirable crystalline silica awareness information for job applicants;
- Work Safely training including RCS and mask fit testing throughout Victoria 2024.

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Appendix B

25/06/2019 Email from Safe Work Australia:

All accepted workers' compensation claims[1] for Silicosis in Australia between 2000-01 and 2016-17

Financial year	No. of claims
2000-01	20
2001-02	25
2002-03	20
2003-04	15
2004-05	25
2005-06	10
2006-07	10
2007-08	15
2008-09	10
2009-10	5
2010-11	n.p.
2011-12	10
2012-13	n.p.
2013-14	10
2014-15	10
2015-16	10
2016-17p	10
Total	**185**

Explanatory notes:

The number of claims shown in this table have been rounded to the nearest 5 to maintain confidentiality, therefore the sum of claims may not equal the total.

p Data for 2016-17 is preliminary and subject to change when new data is available.

1 All accepted workers' compensation claims excluding journey claims.

n.p. Data suppressed due to confidentiality restrictions.

Source: Safe Work Australia's National Data-Set for Compensation-based Statistics

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Inc. No. A0039304E | ABN 85 154 053 129

Appendix B

16/01/2020 Email from Safe Work Australia: As shown in the table sent earlier, the annual number of silicosis claims are very small. To provide you a breakdown by industry while keeping the data meaningful, I have condensed the years together to have a larger total. I have also given you the statistics for the industries with the largest claim numbers (Construction, Electricity, gas, water and waste services, Manufacturing and Mining).

Safe Work Australia primarily uses the Australian and New Zealand Standard Industrial Classification (ANZSIC) to code workers' compensation claims into different industry categories. Please see the highlighted categories for the specific industries you mentioned (note: stone benchtop cutting would be included in Other non-metallic mineral product manufacturing).

We have also finalized our 2017-18 Safe Work Australia's National Data-Set for Compensation-based Statistics which includes updates to the historical data. As you requested the number of workers' compensation claims for silicosis per financial year from 2000/01 to 2017/18 in your original request, I have added the latest year in.

In the attachment is two tables:
1) All accepted workers' compensation claims for silicosis in Australia between 2000-01 and 2017-18p.
2) All accepted workers' compensation claims for silicosis in Australia by select industries, 2000-01 and 2017-18p (combined)
Definitions and explanatory notes are included in the attachment.
Safe Work Australia - Workers' Compensation Statistics

Accepted workers' compensation claims

Explanatory notes:

The number of claims shown here are rounded to the nearest 5 to maintain confidentiality. Hence sum of claims in the column may not be equal to the total claims shown.

p Data for 2017–18 is preliminary and will be subjected to upwards revision when new data is available.

1 All accepted workers' compensation claims excluding journey claims.

n.p. Data suppressed due to confidentiality restrictions.

The claims numbers shown here were extracted for Nature of injury/disease: 784 Silicosis (using the 2008 Type of Occurrence Classification System)

The claims data has been sourced from Safe Work Australia's National Data Set for Compensation-based Statistics (NDS), which is compiled based on workers' compensation

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Inc. No. A0039304E | ABN 85 154 053 129

Appendix B

data provided annually by each of the jurisdictional workers' compensation authorities.

Table 1: All accepted workers' compensation claims1 for Silicosis in Australia between 2000-01 and 2017-18p

Financial year	Number of claims
2000-01	20
2001-02	25
2002-03	15
2003-04	15
2004-05	25
2005-06	5
2006-07	10
2007-08	15
2008-09	5
2009-10	n.p
2010-11	n.p
2011-12	10
2012-13	n.p
2013-14	10
2014-15	10
2015-16	10
2016-17	5
2017-18p	15
Total	200

Safe Work Australia - Workers' Compensation Statistics

Accepted workers' compensation claims

Explanatory notes:

The number of claims shown here are rounded to the nearest 5 to maintain confidentiality. Hence sum of claims in the column may not be equal to the total claims shown.

p Data for 2017–18 is preliminary and will be subjected to upwards revision when new data is available.

PO Box 396, Kilmore, Victoria 3764 | 03 5781 0655 | enquiries@cmpavic.asn.au
Inc. No. A0039304E | ABN 85 154 053 129

Appendix B

1 All accepted workers' compensation claims excluding journey claims.

n.p. Data suppressed due to confidentiality restrictions.

The claims numbers shown here were extracted for Nature of injury/disease: 784 Silicosis (using the 2008 Type of Occurrence Classification System)

The claims data has been sourced from Safe Work Australia's National Data Set for Compensation-based Statistics (NDS), which is compiled based on workers' compensation data provided annually by each of the jurisdictional workers' compensation authorities.

PO Box 396, Kilmore, Victoria 3764 | 03 5781 0655 | enquiries@cmpavic.asn.au
Inc. No. A0039304E | ABN 85 154 053 129

Appendix B

Table 2: All accepted workers' compensation claims1 for Silicosis in Australia by select industries, 2000-01 and 2017-18p (combined)

ANZSIC Code	Industry	Number of claims
E	**Construction**	**65**
30	**Building construction**	**10**
302	Non-residential building construction	10
301	Residential building construction	n.p.
32	**Construction services**	**45**
321	Land development and site preparation services	25
329	Other construction services	15
324	Building completion services	n.p.
323	Building installation services	n.p.
31	**Heavy and civil engineering construction**	**10**
D	**Electricity, gas, water and waste services**	**25**
28	**Water supply, sewerage and drainage services**	**25**
26	**Electricity supply**	**n.p.**
C	**Manufacturing**	**55**
20	**Non-metallic mineral product manufacturing**	**35**
201	Cement, lime, plaster and concrete product manufactur	5
202	Ceramic product manufacturing	5
201	Glass and glass product manufacturing	n.p.
209	Other non-metallic mineral product manufacturing	20
22	**Fabricated metal product manufacturing**	**5**
19	**Polymer product and rubber product manufacturing**	**5**
21	**Primary metal and metal product manufacturing**	**n.p.**
	Other Manufacturing subdivisions	**5**
B	**Mining**	**25**
09	**Non-metallic mineral mining and quarrying**	**15**
091	Construction material mining	15
0911	*Gravel and sand quarrying*	*n.p.*
0919	*Other construction material mining*	*10*
10	**Exploration and other mining support services**	**5**
8	**Metal ore mining**	**n.p.**
6	**Coal mining**	**n.p.**
	Other industry divisions	**25**
	Total claims	**200**

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Inc. No. A0039304E | ABN 85 154 053 129

Appendix B

14/11/2024 Email from Safe Work Australia: Safe Work Australia compiles national workers' compensation statistics using data obtained from workers' compensation authorities in each state, territory and the Commonwealth government. These data are collated into the National Data Set for Compensation-based Statistics (NDS), which is Safe Work Australia's primary source of information on work-related injuries and diseases. Additional data on silicosis claims is provided to Safe Work Australia by icare.

In 2022-23p there were 119 accepted workers' compensation claims for silicosis. This is down from the peak of 254 in 2019-20, but much higher compared with the 15 claims recorded 10 years ago in 2012-13.

Table: Number of accepted workers' compensation claims for silicosis

	Number claims for silicosis
2010-11	16
2011-12	19
2012-13	15
2013-14	19
2014-15	20
2015-16	27
2016-17	14
2017-18	37
2018-19	232
2019-20	254
2020-21	167
2021-22	107
2022-23p	119

Notes:

- Data provided includes workers' compensation claims from both the NDS and from icare.
- Combining these data sources data are readily available from 2010-11 onwards.
- The 2022-23p data are preliminary (denoted by 'p'). Revisions in preliminary results are likely over future years as open claims are finalised.
- Owners of unincorporated enterprises and independent contractors are generally not covered under workers' compensation schemes; these make up approximately 12% of Australian workers.
- Silicosis may be under-represented by claims data, as most claims for respiratory diseases are for non-specific categories. This may be because an accurate and final diagnosis may not have been made when claims were lodged and accepted, and when

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Inc. No. A0039304E | ABN 85 154 053 129

- more conclusive diagnoses became known (such as a diagnosis for silicosis), the data in the lodged claims were not updated.

Appendix B

20/11/2024 Email from Safe Work Australia: In the NDS, the occupation of the claimant is coded using the Australian and New Zealand Standard Classification of Occupations (ANZSCO) at the 4-digit level.

Below we've provided a table showing a breakdown of the silicosis compensation claims by occupation of the claimant.

Silicosis claims from icare have been excluded, as occupational coding for this dataset is incomplete.

Table: Workers' compensation claims for silicosis by ANZSCO occupation unit group (2010-11 to 2022-23p combined)

	Proportion of silicosis claims (2010-11 to 2022-23p combined)
Bricklayers and stonemasons	36%
Wall and floor tilers	30%
Other miscellaneous labourers	8%
Drillers, miners and shot firers	3%
Clay, concrete, glass and stone processing machine operators	3%
Building and plumbing labourers	2%
All other occupations	19%
Total silicosis claims from NDS	**100%**

Source: National Data Set for Compensation-based Statistics (NDS)

Notes:

- Data provided is based on 724 accepted workers' compensation claims for silicosis from 2010-11 to 2022-23p in the National Data Set for Compensation-based Statistics (NDS). It excludes silicosis claims from icare.
- The 2022-23p data are preliminary (denoted by 'p'). Revisions in preliminary results are likely to occur over future years as open claims are finalised.
- Owners of unincorporated enterprises and independent contractors are generally not covered under workers' compensation schemes; these make up approximately 12% of Australian workers.
- Silicosis may be under-represented by claims data, as most claims for respiratory diseases are for non-specific categories. This may be because an accurate and final diagnosis may not have been made when claims were lodged and accepted, and when more conclusive diagnoses became known (such as a diagnosis for silicosis), the data in the lodged claims were not updated.

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