

New silica dust safety regulations for the ACT

Fact sheet

Work health and safety reforms for managing the risks of silica dust are underway in the ACT. These reforms require persons conducting a business or undertaking (PCBUs) to demonstrate they are meeting their workplace obligations and responsibilities under the Work Health and Safety Act and provide better protections for people working with **crystalline silica materials**.

About the reforms

The reforms are being delivered in stages. The first tranche of reforms that have been introduced are:

- > **dry cutting of engineered stone** is prohibited in the ACT
- > new minimum standards for safety controls apply for mechanically cutting engineered stone, concrete, cement, bricks, mortar, masonry and natural stone containing silica
- > the cutting of crystalline silica materials will be expressly defined as '**high risk construction work**'
- > workers must complete mandatory **silica awareness training**.

Exposure risks to silica dust are heightened with uncontrolled dry cutting using power tools.

What activities do new mechanical cutting rules apply to?

The new rules will apply to the **cutting of crystalline silica materials** using a power tool or **mechanical process**.

Cutting of these materials means:

- > crushing
- > drilling
- > grinding
- > polishing
- > sanding
- > trimming

The **crystalline silica material** this applies to includes:

- > engineered stone
- > natural stone containing crystalline silica
- > cement, concrete and masonry, mortar or brick product containing crystalline silica.

*A **mechanical process** for the purposes of controlling silica dust includes power tools, tools using an electric motor base, excavation and construction machinery and equipment. It does not include tools that rely exclusively on manual (hand) power for operation.*

Crystalline silica is most dangerous to health when dust is generated, becomes airborne and is inhaled.

What you need to do to manage the risks

PCBUs must implement control measures to effectively manage the risks of exposure to silica dust. If the risks of exposure cannot be eliminated, PCBUs must apply specific control measures to minimise the risks.

Using control measures

When cutting **engineered stone** PCBUs need to implement a combination of controls that include at least a continuous feed of water over the cutting area (water delivery control).

For **other crystalline silica** materials, PCBUs are required to consider what control measures are reasonably practicable. Refer to the WorkSafe ACT [website](#) for more information on how to consider what is reasonably practicable.

A water delivery control must be considered first. If this is not reasonably practicable, there are a number of alternative combinations that may be used. This could include:

- > another wet dust suppression method using water or another suitable liquid or emulsion such as a spraying, sprinkler or misting technique, water curtain system, foam, gel or other suitable liquid or an on-tool water suppression system

OR

- > an on-tool dust vacuum may be used as the primary control measure if it is not reasonably practicable to use a wet dust suppression method.

Additional control measures

PCBUs **must also** implement at least one of the following specified control measures for cutting material containing crystalline silica:

- > on-tool dust extraction, if not already being used

- > segregation of work areas
- > local exhaust ventilation systems
- > isolation of the work task, workers or machine operator from the cutting.

Where on-tool dust extraction is selected, a Class H (high risk hazardous material) vacuum extraction must be used unless the cutting material contains less than 25% crystalline silica. In those cases, a Class M (medium risk hazardous material) vacuum extraction may be used.

What if using at least two specified control measures is not possible?

If it can be demonstrated that it is not reasonably practicable to use at least two specified control measures you need to at least use:

- > wet dust suppression method OR on tool dust vacuum OR a suitable enclosed cabin
- OR, if this is not possible
- > at least one specified control measure AND respiratory protective equipment.

Use the flow chart over the page to work through the steps to determine which method to use.

High risk construction work rules

From 31 January 2023, the cutting of crystalline silica material using a power tool or mechanical process will be expressly defined as '**high risk construction work**'.

This means PCBUs will need to make sure they have **consulted with their workforce and put in place a safe work method statement (SWMS)** for the activities that involve that kind of cutting of crystalline silica materials.

PCBUs may already have a SWMS in place because airborne contaminants at their workplace result in the workplace being classified as 'high risk construction work'. If so, it is important to check that this covers the activity of cutting crystalline silica material using a power tool or mechanical process; and demonstrates that the most effective control measures are being used.

For more information about SWMS, and a template, refer to the WorkSafe ACT [website](#).

Respiratory protective equipment

Work health and safety laws already operate to require respiratory protective equipment (RPE) to be used whenever there is an uncontrolled risk of silica dust exposure. This requires PCBUs to consult their workforce and determine whether there is a residual risk of exposure, having regard to the circumstances and effectiveness of other controls.

This obligation continues to apply even if you are using a combination of specified control measures.

However, in circumstances where you can only use one specified control measure, that is not a wet control or on tool dust vacuum, RPE is being made mandatory.

Mandatory training

From 1 July 2023 PCBUs **must**:

- > ensure workers engaged in high-risk crystalline silica work or who are in a declared occupation have completed the *10830NAT – Course in Crystalline Silica Exposure Prevention*, and
- > ensure that a record of training is kept for five years.

For more information about the declared occupations silica awareness training refer to the declaration instrument on the ACT Legislation Register [here](#).

The ACT recognises the benefits of awareness training as a control measure to:

- > support reduction in silica related illnesses and injury
- > combat misinformation across all industries involved in silica risk work
- > engage workers and PCBUs in appropriate elimination and control strategies
- > support PCBUs and workers understand how to work safely with silica.

Penalties

Silica dust and silica risk work pose serious health risks to workers and penalties apply to breaches of the regulations.

It is an offence to allow uncontrolled dry cutting of crystalline silica materials. The penalties that apply to PCBUs who do not control the risks of silica dust are \$6,000 for individuals or \$30,000 for body corporates.

Penalties also apply for PCBUs who do not comply with the new mandatory training scheme for workers involved in silica dust work. Penalties for not ensuring that your workers are trained in the approved crystalline silica awareness training course will be up to \$6,000 for individuals or \$30,000 for body corporates.

What these reforms mean for workers

The silica dust reforms are aimed at protecting workers from the adverse health impacts associated with silica dust. Together with PCBUs, workers are required to engage in:

- > silica awareness training; and
- > ensuring correct use of control measures including wet dust suppression methods and respiratory protection equipment (RPE) to control the risk of exposure to silica dust from cutting material containing crystalline silica.

More information

For more information about the changes contact ACT Government Workplace Safety and Industrial Relations by sending an email to WSIR@act.gov.au.

Deciding which control measures must be used – crystalline silica materials other than engineered stone

Cutting crystalline silica material with a power tool or using another mechanical process will be expressly defined as ‘high risk construction work’. This means you **must prepare a safe work method statement (SWMS)** that covers this work. A SWMS is where you can document, implement, monitor and review the controls you have in place to manage silica dust exposure. Several existing types of high risk construction work may also involve the cutting of silica containing materials. If there is already an up to date SWMS in place that covers silica cutting, then there is no need to do another one.

1

Water delivery plus at least one other specified control measure

If this is not reasonably practicable use the measures (2) below

2

Use at least two reasonably practicable control measures:

Wet dust suppression method plus one other specified control measure

OR

On tool vacuum plus one other specified control measure

If this is not reasonably practicable use the measures (3) below

3

Use at least one of the following control measures:

Wet dust suppression method OR on tool vacuum OR a fully enclosed operator cabin fitted with a high efficiency air filtration system

If this is not reasonably practicable use the measure (4) below

4

If none of the above is possible, at least one specified control measure PLUS mandatory RPE

REMEMBER: you may still need to wear RPE to manage any remaining/residual risk of exposure to silica dust

Specified control measures:

- continuous feed of water over the cutting area (water delivery)
- a wet dust suppression method to suppress airborne crystalline silica produced by the cutting
- the attachment of a Class H vacuum cleaner to the tool used for cutting
- for material containing less than 25% crystalline silica—you can use a Class M vacuum cleaner to the tool used for cutting
- the use of a local exhaust ventilation system
- isolation of the place where the cutting occurs from the rest of the workplace or other workers

Deciding which control measures must be used – engineered stone

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1

Water delivery plus at least one other specified control measure



RPE is mandatory when cutting engineered stone

Specified control measures:

- continuous feed of water over the cutting area (water delivery)
- a wet dust suppression method to suppress airborne crystalline silica produced by the cutting
- the attachment of a Class H vacuum cleaner to the tool used for cutting
- for material containing less than 25% crystalline silica—you can use a Class M vacuum cleaner to the tool used for cutting
- the use of a local exhaust ventilation system
- isolation of the place where the cutting occurs from the rest of the workplace or other workers