Optional template

# Assessing if the processing of silica is high risk – optional template

**This template is designed to help you to document an assessment to determine if the processing of a crystalline silica substance is high risk, as defined in Chapter 8A of the WHS Regulations.**

## PCBU obligations

If you are intending to process a crystalline silica substance[1], you **must** assess the risk and document the outcome before commencing work.

If you determine that the processing of the crystalline silica substance is high risk, you **must** also complete a silica risk control plan and comply with additional regulations as outlined in Part 3 of the model Code of Practice: Managing risks of respirable crystalline silica in the workplace (Silica Code).

## Determining if the processing of a crystalline silica substance is high risk

You must complete an assessment for each type of processing carried out at the workplace to determine if it is high risk. However, if you have more than one type of processing at your workplace occurring simultaneously, this may increase the likelihood that there will be a risk to the health of persons at the workplace. In this instance, the assessment may cover all types of processing of a crystalline silica substance, and you should consider in your assessment whether this will increase the risk to the health of persons at the workplace. For example, different workers may be undertaking different types of processing in the same shift. When considered individually each type of processing might not be assessed as high risk with regard to the below considerations. However, the combined exposure to respirable crystalline silica (RCS) from multiple processes may be reasonably likely to result in a risk to the health of a person at the workplace, making the overall assessment as high risk.

When conducting this assessment, the WHS Regulations state you must have regard to:

- the specific processing to be undertaken
- the form or forms of crystalline silica present in the crystalline silica substance
- the proportion of crystalline silica contained in the crystalline silica substance, determined as a weight/weight (w/w) concentration
- the hazards associated with the work, including the likely frequency and duration that a person will be exposed to RCS,
- whether the airborne concentration of RCS that is present at the workplace is reasonably likely to exceed half the workplace exposure standard,

- any relevant air and health monitoring results previously undertaken at the workplace, and
- any previous incidents, illnesses or diseases associated with exposure to RCS at the workplace.

You must weigh up all of the above matters when conducting the assessment and cannot solely rely on control measures implemented in accordance with sub-regulation 529B(1)(b) (duty for the processing of a crystalline silica substance to be controlled) to determine that the processing of a crystalline silica substance is not high risk. In addition, you must not have regard to the use of any personal protective equipment and administrative controls used to control the risks associated with RCS in the assessment.

You must record the assessment in writing, including how you have considered the above factors, and the reasons why the processing is determined to be high risk or not high risk.

## Outcome of risk assessment

If you determine that your processing of a crystalline silica substance is not high risk, you must still ensure any processing is controlled in accordance with regulation 529B.

If you determine that your processing of a crystalline silica substance is high risk, you must complete a silica risk control plan and ensure you comply with the additional regulations applying to processing of a crystalline silica substance that is high risk, which are outlined in Part 3 of the Silica Code.

## Related guidance material

Additional information on the duties of PCBUs when working with crystalline silica substances is included in Part 3 of the Silica Code.

## How to use this template

This template is an optional tool designed to assist you to determine if your processing of a crystalline silica substances is high risk.

High risk, in relation to the processing of a crystalline silica substance is defined in the regulations as the processing of a crystalline silica substance that is reasonably likely to result in a risk to health of a person at the workplace.

Once documented, it is your responsibility to consider all factors in determining if your processing is high risk. When making this assessment, you must provide justification.

A WHS regulator has the power to inspect an assessment and require a PCBU to review it if they do not agree with the assessment outcome.

If you determine that processing of a crystalline silica substance is high risk as a result of the assessment, you will need to complete a silica risk control plan, before commencing work.

**Whilst this template can be used to assist you in meeting your WHS duties, it is not mandatory to use this template, and other forms of documenting the assessment are acceptable, provided they demonstrate consideration of the matters outlined above.**

Optional template

# Assessment

**This assessment was prepared on [__/__/__].**

## PCBU Details

**Business name:** Click here to enter text.

**Business address:** Click here to enter text.

## Details of person completing the assessment

**Name:** Click here to enter text.

**Position:** Click here to enter text.

**Contact details:** Click here to enter text.

## Workplace(s) this assessment covers

**Please list the address(es) of the workplace(s) this assessment covers:**
Click here to enter text.

## Consultation

**Have affected workers and their health and safety representatives (HSRs; if applicable) been consulted in the preparation of this assessment:**

☐ Yes ☐ No

**Please briefly describe how workers have been consulted in the preparation of this assessment:**
Click here to enter text.

**Optional template**

## Details of crystalline silica substance

**Please list all crystalline silica substance you work with (materials that contain at least 1% crystalline silica, determined as a weight/weight concentration):**

Click here to enter text.

**If the crystalline silica substance has an available safety data sheet, outline the details below:**

| Product name | Product supplier | Form(s) of crystalline silica present | Silica content (sourced from safety data sheet or product information) |
|---|---|---|---|
| | | | |
| | | | |

Is a copy of the safety data sheet or product information attached to this document ☐ Yes ☐ No

**If a safety data sheet is not available or the crystalline silica substance is a natural material, do you have any other information available to indicate the amount and form(s) of crystalline silica present?**

*Note: this may include any scientific analysis you have conducted to determine the amount and type of crystalline silica present, publicly available information from suppliers or manufacturers, scientific literature etc.*

☐ Yes ☐ No

If yes, please outline below (including any references where applicable):

Click here to enter text.

**Optional template**

**If there is no available information, and you have not conducted any scientific analysis, you should assume the crystalline silica substance contains high levels of crystalline silica for the purpose of this assessment, until you can determine otherwise.**

## Identifying processing of a crystalline silica substance

For the purpose of this assessment, processing of a crystalline silica substance means:

a. the use of power tools or mechanical plant to carry out an activity involving the **crushing**, **cutting**, **grinding**, **trimming**, **sanding**, **abrasive polishing** or **drilling** of a crystalline silica substance; or
b. the use of **roadheaders** to excavate material that is a crystalline silica substance; or
c. the **quarrying** of a material that is a crystalline silica substance; or
d. **mechanical screening** involving a material that is a crystalline silica substance; or
e. **tunnelling** through a material that is a crystalline silica substance; or
f. a **process** that exposes, or is reasonably likely to expose, a person to respirable crystalline silica during the manufacture or handling of a crystalline silica substance.

When carrying out processing of a crystalline silica substance, the generation of harmful RCS is the predominant hazard. Please outline the factors associated with the processing occurring at your workplace in the table below to help you assess likely exposure to RCS. If you have more than one processing task at your workplace occurring simultaneously, please document for each task.

In considering the likely exposure to RCS, you may take into account any isolation or engineering controls in place to control RCS, but you cannot take into account any administrative controls or personal protective equipment.

## Optional template

| Location | Task | Frequency and duration | Isolation or engineering controls | Likelihood of exposure to RCS |
|---|---|---|---|---|
| ***Example only***<br><br>Fabrication workshop – cutting bench | Cutting granite with a bridge saw | 2 workers cutting granite for 2 hours per day, 3 times per week | Wet suppression system using built in blade water feed nozzle | |
| | | | | |

**Optional template**

## Previous air monitoring results

You must consider any relevant RCS air monitoring results for your workplace. This means that you should ensure the air monitoring results are relevant to the crystalline silica substance, task, controls and conditions at your workplace. You may also attach relevant air monitoring reports to this assessment as evidence.

If you have previous air monitoring results that are relevant to the processing of a crystalline silica substance being assessed, please use the table below to document them.

| Details | Task details | RCS airborne concentration | Recommended actions |
|---|---|---|---|
| Carried out by: [insert name of independent competent person]<br><br>On: [Insert date]<br><br>In response to: [insert specific trigger or routine] | | | |
| | | | |

**Optional template**

## Airborne concentration of RCS

You must consider whether the airborne concentration of RCS is reasonably likely to exceed half the workplace exposure standard.

As you are considering the airborne concentration of RCS, not the actual exposure of workers to RCS, you must not take into account any protection provided by respiratory protective equipment.

If you have previous RCS air monitoring results from your workplace that are relevant to the processing of a crystalline silica substance being assessed, you should use this data to inform your assessment. However, it is not a requirement to perform new air monitoring to assess whether you are likely to exceed half the workplace exposure standard. You can use personal exposure data obtained from other sources, including:

- the manufacturer of the control or tool used,
- an industry association, or
- a certified occupational hygienist

If you are using exposure data from air monitoring that was not conducted in your workplace, you should ensure the data is relevant to the task, controls and conditions in your workplace.

If you are unsure whether the airborne concentration of RCS is reasonably likely to exceed half the workplace exposure standard, you should indicate yes, until you can determine otherwise (by completing further air monitoring).

Please refer to Part 2.5 of the Silica Code for further information on completing this section.

**Is the airborne concentration of RCS at the workplace reasonably likely to exceed half the workplace exposure standard?**

☐ Yes ☐ No

**Do you have exposure data that supports your determination of whether the airborne concentration of RCS at the workplace is reasonably likely to exceed half the workplace exposure standard?**

☐ Yes ☐ No

**Optional template**

**If yes, please outline in the table below, the exposure data you have used to base your assessment.**

| Type of evidence | Source | Results/data |
|---|---|---|
| For example – air monitoring results, exposure data | For example – scientific literature, safety data sheet, manufacturer publication, industry association, certified occupational hygienist etc. | |
| | | |

**Optional template**

## Previous health monitoring

You must consider any health monitoring performed at your workplace previously and consider the findings of that monitoring, if they are relevant to your processing of a crystalline silica substance. This means that you should ensure the health monitoring results are relevant to the crystalline silica substance, task, controls and conditions at your workplace.

**Have you previously provided health monitoring for workers at your workplace?**

Yes ☐ No

**Are these results relevant to the processing of a crystalline silica substance being assessed?**

☐ Yes ☐ No

If yes, please provide details below.

**Carried out on:** [insert date]

**In response to:** [insert specific trigger or routine]

**Frequency of health monitoring:** [Click here to enter text]

**Do not record personal or confidential health information about individuals in this assessment.**

**Optional template**

## Previous incidents, illnesses or diseases

You must record any previous incidents, illnesses or diseases associated with RCS at your workplace, this may include adverse health monitoring findings. You must have regard to this in assessing whether the processing of a crystalline silica substance is high risk.

Details should be recorded in the table below.

| Details of incidents, illnesses and diseases/adverse health monitoring outcomes | Has this been reported to the WHS Regulator? | Actions arising |
|---|---|---|
| | | |
| | | |

**Do not record personal or confidential health information about individuals in this assessment.**

**Optional template**

## Outcome and justification

You must now use all the information documented in previous sections to determine if your processing of a crystalline silica substance is high risk. In making this assessment, you must weigh up all of the relevant factors. Processing of a crystalline silica substance is considered high risk if it is reasonably likely to result in a risk to the health of a person at the workplace. If you determine that processing of a crystalline silica substance is not high risk, you must be able to explain why it is more likely than not that the process is not high risk.

If you are unable to determine if your processing of a crystalline silica substance is high risk, you must treat it as if it is high risk until you are able to determine otherwise.

Having regard for all the above matters, is the processing of a crystalline silica substance high risk? ☐ Yes ☐ No

Please provide justification of the assessment outcome:

# Next steps

If you have determined your processing of a crystalline silica substance is **high risk**, you **must**:

- complete a silica risk control plan,
- attach a copy of this assessment,
- ensure processing is controlled, in accordance with **regulation 529B** (see Part 2.4 of the Silica Code), and
- ensure you comply with all other duties under WHS laws, including managing the risks from other hazards that may be present while undertaking processing of a crystalline silica substance, for example, noise exposure from power tools.

If you have determined your processing of a crystalline silica substance is **not high risk**, you **must**:

- ensure processing is controlled, in accordance with **regulation 529B** (see Part 2.4 of the Silica Code), and
- ensure you comply with all other duties under WHS laws, including in relation to other hazards that may present a risk while undertaking processing of a crystalline silica substance, for example, noise exposure from power tools.

# Appendix

You may attach copies of the following documents to this assessment:

- any safety data sheets, product information, literature or other suitable evidence used to support this assessment.
- any scientific analysis of a crystalline silica substance to determine its crystalline silica content.
- relevant occupational hygiene air monitoring reports.

[1] A crystalline silica substance is any material that contains at least 1% crystalline silica, determined as a weight/weight (w/w) concentration.