



An initiative of the South Australian Construction
Safety Alliance (SACSA).

Essentials for safe management of: Respirable Crystalline Silica (RCS)

WHS Duty Holders



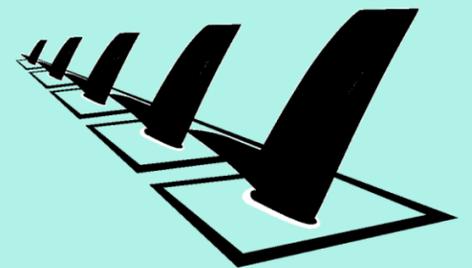
- A PCBU must provide their workers with any necessary information, instruction, training and supervision to enable them to do their work safely.
- Workers must follow reasonable instructions and implement controls as required in the SWMS.
- Principal contractors must have in place arrangements for ensuring compliance.

Health risks and exposure



- The exposure standard for respirable crystalline silica is 0.05mg/m³ as a time-weighted average (TWA) airborne concentration over 8 hours.
- RCS is harmful when inhaled over a long period of time at low to moderate levels, or short periods at high levels.
- RCS is classified as a carcinogen.

Information, instruction, training



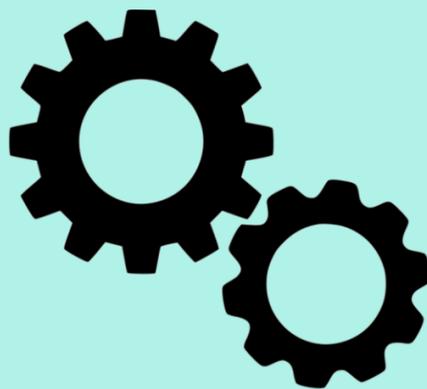
- Training should cover, at a minimum:
- RCS hazards and health risks
 - How to effectively use controls
 - How to maintain and clean equipment, including personal decontamination
 - Use and maintenance of RPE
 - How to dispose of waste
 - What to do if controls fail

Safe Work Method Statements



- High risk construction work includes work 'carried out in an area that may have a contaminated or flammable atmosphere'.
- Tasks involving silica-containing materials such as drilling, cutting, grinding or sweeping, may be considered high risk construction work if RCS contaminates the work atmosphere.

Engineering controls



- Duty holders are required to implement adequate controls to ensure worker exposure does not exceed the standard.
- It is reasonably practicable to have engineering controls in place in all but very rare situations.
- There are two main dust controls used in construction and demolition:
 - ✓ On-tool dust extraction
 - ✓ Water suppression.

Respiratory Protective Equipment (RPE)



- RPE is the lowest order control and should only be used as a last resort.
- RPE should be used when engineering controls do not adequately control risks of exposure to RCS.
- If workers wear a tight-fitting respirator, they must pass an annual respirator fit-test to ensure it provides a good seal for their face size and shape.