

RCS Exposure (Respirable Crystalline Silica)

scope

This guide sets out our minimum requirements for when working with Respirable Crystalline Silica (RCS) dusts and highlights key safety steps to protect workers health.

RCS dusts are produced when cutting, crushing, sanding, grinding, drilling, shoveling or sweeping materials like concrete, rocks, sand, bricks, gravel, sandstone and clay. Exposure to RCS dusts can cause respiratory conditions such as silicosis, chronic obstructive pulmonary disease and lung cancer. These issues may take years to show up.

Other dusts including Asbestos dusts have different controls that are covered in separate Water Ways.

Only operate equipment if you are licenced (if required), are competent and have the skills to do the task safely.



minimum PPE requirements



additional PPE

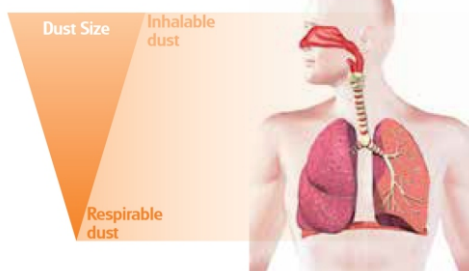
based on site requirements and risk assessment controls



used when exposed to dust not controlled by other means



Health effects



Silica is a natural substance found in concrete, rocks, sand, bricks, gravel, sandstone and clay

- Respirable Crystalline Silica (RCS) dust particles are small and can be harmful if inhaled. RCS particles can reach deep into your lungs potentially causing respiratory health conditions such as silicosis, chronic obstructive pulmonary disease (COPD) and lung cancer

Suppress the dust at its source

- cover stock piles where possible
- use drop sheets and fit covers or lids at dusty processing points
- reduce the amount of times products are moved or handled
- operate in favorable weather conditions where possible
- vacuum up rather than sweep up and avoid using blowers



It is more effective to control dust before it becomes airborne and a breathing hazard



- Schedule works for calm periods
- Slow down the plant & lower the guards
- Have the least staff as possible involved

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Consider water suppression to keep RCS out of the air

Water suppression can be as simple as a spray bottle or knapsack sprayer

- only apply water if safe to do so eg avoiding electrical hazards etc
- use appropriate environmental controls
- manage run-off if using large amounts of water



scan or click to see the full range of environmental controls



On tool water suppression

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Isolate yourself from the dust



- choose equipment and machinery with good dust control systems
- close windows and doors on machinery with air-conditioning and keep the cabs clean
- leave dust covered clothes at work to be cleaned if washing facilities are available

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Use respiratory protection and other PPE as required



- respiratory protection must be used when exposed to dust that is not controlled by other means
- use the correct and fit tested respiratory protection for the product and task
- check the products safety data sheet for its minimum PPE requirements and recommended controls
- avoid creating more dust when removing overalls etc
- wash your face and hands immediately after working with dust and before eating, drinking or smoking
- have your lung function checked through the health check process if you are regularly exposed to RCS dust at work

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Continually monitor the risks and review and adjust the controls as needed for the duration of the work

- Know what to do in an emergency



scan or click for more info and video

