

# SILICA DUST SERVICES

Precise Consulting offer testing to identify the risk levels of exposure to harmful Silica Dust.

#### RESPIRABLE CRYSTALLINE SILICA (RCS) DUST

When very small particles of crystalline silica dust are inhaled, they can travel deep into lung tissues and cause irreversible damage. Diseases associated with silica-induced lung damage include silicosis, lung cancer, chronic obstructive pulmonary disease (COPD) and kidney disease. Silicosis is a fully preventable, but incurable disease, that is often fatal.

RCS dust is created when materials that contain silica are disturbed in some manner to generate fine dust particles. Crystalline silica (otherwise known as silicon dioxide, SiO2) is a very common, naturally occurring mineral that is used in a variety of industrial products. Some materials that contain silica include:

- > Sand
- Concrete
- > Stone
- > Mortar
- > Glass
- > Pottery
- > Ceramics
- Bricks
- > Manmade Stone Benchtops

#### SILICA DUST IN THE WORKPLACE

Under the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016:

 PCBU's have a duty to manage risks associated with hazardous substances and ensure that workers are not exposed to substances at levels that exceed prescribed exposure standards; If the PCBU is not certain on reasonable grounds whether the concentration of a substance hazardous to health at the workplace exceeds the relevant exposure standards, then the PCBU must ensure that exposure monitoring is carried out.

The workplace exposure standard for RCS dust in New Zealand is 0.1 mg/m<sup>3</sup>. This is currently under review by Worksafe. There are other much lower internationally recommended exposure limits such as the American Conference of Governmental Industrial Hygienists (ACGIH) limit of 0.025 mg/m<sup>3</sup>.

Anyone working with materials containing silica, needs to know what levels are present to be able to best limit exposures.

## SILICA DUST SERVICES

**Exposure Monitoring** 

Our experienced consultants can undertake assessments of current controls, along with area and personal exposure monitoring, to provide expert advice and recommendations for minimising the risks from respirable crystalline silica.



Sampling is undertaken using personal sampling pumps which are attached to a respirable sampling head fitted with an appropriate filter. The pumps are worn on the workers belt and the sampling head is placed in the workers breathing zone (within 30 cm radius of the centre of the nose). Sampling is undertaken over the full shift and when completed analysis is undertaken at a NATA accredited laboratory to determine the concentrations of respirable dust and respirable crystalline silica dust.

If you are unsure what you or your staff exposures are to RCS dust levels, then give us a call today to discuss how we can help.

### PRECISE CONSULTING – YOUR HAZMAT TESTING SPECIALISTS

Precise Consulting provide a service solution for those involved in many facets of the construction, demolition and refurbishment industry where Hazardous Materials (HAZMAT) are found.

We specialise in asbestos sampling, asbestos surveying, asbestos risk assessment, asbestos management, methamphetamine sampling, air quality testing for dust, mould and silica, and workplace and alcohol testing.

Precise Wellington is IANZ accredited (ISO/IEC 17025) for Methamphetamine sampling, with Key Technical Personnel located in all branches.

You can be assured of quality service, professionalism, and fast, accurate results. We would love the opportunity to help you, whether it's a problem in your home, at work, or on a building site.

Please get in touch with us to see how we can help, or to get a quote on any of the below service areas:

#### **OUR SERVICES**

- > Mould
- > Asbestos
- Methamphetamine
  Contamination Testing
- > Occupational Health & Hygiene
- > Hazardous Materials
- > Workplace Drug & Alcohol Testing
- > Contaminated Land
- > Technical Consultancy





#### CONTACT US TODAY

Please get in touch for more information on any of our HAZMAT services including; asbestos sampling, surveying and management services, workplace health & safety solutions and meth testing.

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