WHSQ Respirable Crystalline Silica & Work Health & Wellbeing Toolkit

WELCOME

Brisbane Region Meeting – 11 June 2019, 347 Ann Street, Brisbane

S.I.A. Safety Institute of Australia

Queensland Government
Brisbane Region Representatives

Jo Kitney  Cameron Caldwell  Jane Willis
SIA Brisbane Region

- Range of events and venues
- Meetings and site visits
- Networking and celebrations
- Region representatives
Our host:

Workplace Health and Safety
Electrical Safety Office
Workers' Compensation Regulator
Presentations

1. WHS Queensland – Respirable Crystalline Silica
   Bradley Geinitz - Principal Advisor (Occupational Hygiene), WHSQ

2. Toolkit for Work Health Planning
   Janine Lees & Alison Abbot, WHSQ

3. SIA Events Update
Construction dust

Brad Geinitz, WHSQ
The problem with respirable dust
Respirable Crystalline Silica (RCS)

Workplace exposure standard 0.1 mg/m³ (8h TWA)
Good, bad, fatal
Enforcement
Dust extraction
Dust extraction

Classes, filtration and suitability of industrial vacuum cleaners (AS/NZS60335.2.69)

<table>
<thead>
<tr>
<th>L (light hazard) dust class</th>
<th>M (medium hazard) dust class</th>
<th>H (high hazard) dust class</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="L" /></td>
<td><img src="image" alt="M" /></td>
<td><img src="image" alt="H" /></td>
</tr>
<tr>
<td><strong>99% filtration</strong></td>
<td><strong>99.9% filtration</strong></td>
<td><strong>99.995% filtration</strong></td>
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<tr>
<td>Dusts with a workplace exposure standard greater than 1 mg/m³ (8-hour TWA*) (excluding wood dusts).</td>
<td>Dusts with a workplace exposure standard greater than or equal to 0.1 mg/m³ (8-hour TWA*) and all wood dusts.</td>
<td>Dusts with a workplace exposure standard less than 0.1 mg/m³ (8-hour TWA*), carcinogenic dusts, pathogenic dusts.</td>
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<td>Examples include:</td>
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<td>Examples include:</td>
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<tr>
<td>- calcium carbonate (e.g. plaster, plasterboard, gypsum)</td>
<td>- chromium</td>
<td>- respirable crystalline silica (RCS)</td>
</tr>
<tr>
<td>- aluminium (e.g. dusts from polishing and machining).</td>
<td>- hard and soft wood dusts.</td>
<td>- lead dust and fumes</td>
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<tr>
<td></td>
<td></td>
<td>- asbestos.</td>
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</tbody>
</table>

*8-hour time-weighted average (TWA) is the maximum average airborne concentration of a substance when calculated over an eight-hour working day, for a five-day working week. The Hazardous Chemicals Information System provides more information on workplace exposure standards.

Note: WHSQ accepts both M and H-class for RCS in construction.
Water suppression
Respirators

<table>
<thead>
<tr>
<th></th>
<th>disposable</th>
<th>half-face reusable</th>
<th>full-face reusable</th>
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</thead>
<tbody>
<tr>
<td><strong>Fit testing is required for these respirators</strong></td>
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</tr>
</tbody>
</table>

![Image of respirators: disposable, half-face reusable, full-face reusable]
Fit-testing

Respirator Fit Test

Qualitative

Quantitative

Fit Check
Housekeeping
High risk construction work

- is carried out in an area that may have a contaminated or flammable atmosphere
Exposure monitoring

- **Australian Standard 2985:2009 Workplace Atmospheres - Method of sampling and gravimetric determination of respirable dust.**
- **Sampling must be undertaken in the breathing zone of the worker**
- **Use a competent person (such as a certified occupational hygienist (COH))**
Enforcement

**Prohibition notice** (including, but not limited to):
- RCS-generating task + no controls or controls not working (e.g. half face respirator with beard & no or inadequate engineering controls)

**Improvement notice** (including, but not limited to):
- Engineering controls
- RPE use & selection
- SWMS (+ Infringement)
Resources

2. Work Health and Wellbeing Toolkit
Janine Lees & Alison Abbot, WHSQ
3. SIA Events Update

SIA Brisbane Region
SIA QLD Visions Conference
SIA Events

https://www.sia.org.au/events
The Safety Institute of Australia's Brisbane Region network cordially invites SIA Members and Non Members to join us for series of WHS/OHS professional development and networking events in 2019.

**WHS Legal Update** - Minter Ellison Lawyers, Tuesday 30 April  
**Silica and WHS Management** – Brisbane, Tuesday 11 June  
**Mid-Year Networking Event** – Breakfast Creek Hotel, Thursday 25 July  
**High Risk Work Licensing and Training** - WH&S More Skills, Thursday 5 September  
**WHSQ Safe Work Breakfast Forum/s** - Brisbane, October  
**End of Year Networking Event** – Breakfast Creek Hotel - Thursday 28 November
Thank you