

Review of exposure risk from respirable crystalline silica during surface coal mine field maintenance, workshop maintenance and inspection activities



Respirable crystalline silica
workplace exposure standard

0.05mg/m³

Observations

Over the last 12-months the NSW Standing Dust Committee has observed an increase in respirable crystalline silica (silica) exceedances in surface coal mine workers completing maintenance and inspection activities.

The key issues identified in mine exceedance investigations include:

- Failure to anticipate potential increase in silica exposure risk during maintenance and inspection tasks due to dust accumulation on equipment and work surfaces.
- Lack of pre-task cleaning of equipment and work areas before maintenance and inspection activities.
- Using compressed air for cleaning and maintenance tasks.

None of the surface mine maintenance workers who exceeded the silica exposure standard in 2023 were reported to be wearing Respiratory Protective Equipment (RPE).

Recommendations

- Ensure airborne dust risk assessments and management plans consider silica exposure risk during maintenance and inspection tasks and that appropriate mitigation controls are identified and implemented.
- Identify and review all tasks involving the use of compressed air for dust removal to determine the effectiveness of current controls.
- Review the type and usage of RPE during maintenance and inspection activities to ensure appropriateness.
- Incorporate workers involved in maintenance, inspection and non-routine tasks into personal dust exposure monitoring programs.

It is recommended that this Standing Dust Committee information bulletin is communicated to all relevant people at your mine and a copy of the bulletin is placed on mine noticeboards.

For further information contact:

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