NSW Standing Dust Committee





Review of exposure risk from airborne dust



Respirable Crystalline Silica (RCS) Surface Mobile Equipment Operators

Observations

Over the last 12 months, the NSW Standing Dust Committee has identified an increase in RCS exposure and exceedances of the workplace exposure standard among surface workers operating mobile equipment, including excavators, dozers, tyre handlers, drills, trucks and other ancillary equipment.

Common issues identified during exceedance investigations include:

- damaged or worn cabin seals (door/window), compromising cabin pressurisation and allowing dust ingress
- cabins not cleaned adequately
- · cloth seat covers retaining dust
- · vacuums not available or out of service
- cabin cleaning undertaken using dry sweeping or compressed air
- respiratory protective equipment (RPE) not worn.



Above: Example of poor cabin floor conditions that contributed to a worker exceedance of the RCS workplace exposure standard.

Health impacts of RCS

Exposure to silica dust can have serious long-term health effects, including silicosis, lung cancer and kidney disease. Silica-related disease is preventable when effective controls are implemented to eliminate or minimise exposure.

Recommendations

- Inspect cabin seals regularly and repair or replace if damaged
- Consider cabin pressure, filtration and monitoring guidance outlined in AS/ISO 23875 Mining: Air quality control systems for operator enclosures: Performance requirements and test methods
- Implement a pre-start cabin cleaning check
- Clean cabins using a HEPA-filtered vacuum or wet method – do not dry sweep or use compressed air
- Ensure workers are aware of the required actions when cabin defects or dust control issues are identified.

It is recommended that this Standing Dust Committee information bulletin is communicated to all relevant personnel through toolbox talk or prestart meetings, and that a copy is displayed on mine noticeboards.

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