

# Lung bus drives excellence in health monitoring



At the Rozelle Interchange Project we put the health and safety of our people first. To ensure that health and safety is the number one priority in our workplace we have implemented systems, processes and procedures across our sites to effectively protect our people from the risk of Respirable Crystalline Silica (RCS).

## What is RCS?

When materials containing crystalline silica are cut, broken, or drilled into silica is liberated as dust particles in the air. Silica dust is about 10 microns in size making it 15 times smaller than a piece of human hair. RCS is very difficult to see underground and is small enough to reach the alveolar regions of the lungs.

RCS poses a significant health as overexposure to this silica dust can cause diseases such as silicosis, a long-term lung disease.

To protect our workers from this health risk we have implemented strict controls that are in line with the highest standards in the country to prevent, limit and monitor any RCS exposure.

## Lung bus tours the site to ensure good health of staff

A mobile testing facility provided by iCare – known as the ‘lung bus’ conducts mandatory screenings for early detection of dust-related health concerns for staff who work underground, close to the tunnel face and above ground staff.

The ‘lung bus’ was available across the Project’s sites for 12 weeks in 2021 and is returning in April 2022. The examinations take approximately 30-minutes, involving a health history questionnaire, lung function test, respiratory medical examination and an x-ray, if required.

The results are analysed by a respiratory physician. Staff members can confidentially discuss their results with a doctor on site to be informed if there are any issues including other health concerns or if further investigation is needed. Health monitoring reports are provided to each worker and their employer is notified if there is any workplace injury.

The results are returned to iCare as part of the NSW government register of medical and occupational history of employees on previous and future construction projects. The Project is supportive and has consulted on a campaign by the Australian Worker’s Union to set up national regulations to protect workers from RCS so that workers health is monitored if they are employed on projects in other states of Australia.

The Rozelle Interchange was the nation’s first major project to expand the monitoring of lung health for surface workers across different activities.

Lung screening is part of the pre-employment process for relevant workers ensuring they are provided a better level of care. If any issues are detected as part of the lung screening staff are consulted and can be transferred to other qualified roles or undertake opportunities for retraining, to remove them from further exposure to RCS.

The Project’s controls to minimise the risk of RCS:

- Implementing an RCS monitoring regime across the surface works.
- Provisioning a full-time ventilation engineer and a full-time occupational hygienist.
- Conducting daily air quality monitoring and monthly occupational hygiene exposure testing regime monitoring RCS exposure against the Workplace Exposure Standard (WES).
- Push and pull ventilation system including fans throughout the tunnels and a scrubber at excavation faces to collect dust at the source.
- Mandatory fit-tested PPE equipment of respiratory protection, dust masks and powered purifying air respirators worn by any worker involved in dust generating activities or who will be exposed to RCS.
- Pre-employment and annual lung screenings for early detection of dust-related health concerns.

The planning, execution, and success of the RCS processes and procedures have significantly reduced worker exposure to RCS and demonstrated excellence in health and safety.

