Background

The Queensland Mines Inspectorate administers state mining safety and health legislation, working with industry, unions and other stakeholders.

Industry is encouraged to use the performance indicators outlined in the Queensland Mines and Quarries Safety Performance and Health report, and the detailed data available for download, to improve safety and health management systems and processes.

Key Regulation Indicators

The number of high potential incidents (HPIs) in mines has risen, but given the increased employment and hours worked, the HPI frequency rate has remained steady.

In the last two years we have observed a significant increase in the frequency rate for high potential incidents for underground coal mines and quarries.

Fatalities

Mr Daniel Springer, was fatally injured on 5 August 2017 when an external wear plate that he was in the process of removing from an excavator bucket unexpectedly sprung up and struck him in the head. Mr Springer had been using an air carbon arc gouger to cut pieces of the wear plate into smaller sections, as part of maintenance activities.

An investigation by the Queensland Mines Inspectorate identified a number of factors that contributed to the incident. These included deficiencies in risk assessment prior to modifications to equipment, insufficient knowledge of what could cause build-up of stored tension and not recognising the level of risk associated with the hazard of elastic spring-back.

Lost Time Injury and Permanent Incapacity

Data show there has been a major reduction in measured respirable dust levels in underground coal mines since 2017. These reductions are due to regulatory changes requiring reporting of respirable dust data, including single sample exceedances and the introduction of engineering controls by industry.

Respirable Crystalline Silica

Data show the levels of respirable crystalline silica in coal mines are generally well below the occupational exposure standard and in compliance with the regulation, however we are seeing an increasing trend in silica exceedances.

Compliance Activities

Compliance activities will continually be reviewed and amended to reflect emerging risks and priorities. The report details the effectiveness of these compliance actions. Data show a reduction in high potential incident frequency rates for fatal hazards in response to directives and reporting of sub-standard conditions.

Gas management

Gas management in underground coal mines continues to be a concern, with incidents of methane greater than 2.5 per cent still occurring during 2017-18. The Queensland Mines Inspectorate conducted gas management audits at seven of the ten operating underground coal mines.
Respirable Dust Exceedances and Average Exposures

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<thead>
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<th>Year</th>
<th>1H 2016</th>
<th>1H 2017</th>
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<tr>
<td>MLR</td>
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Respirable Crystalline Silica: Single Exceedance Rate – Open Cut and Underground Coal Sites

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