

## Week ending 28 June 2017

This incident summary provides information on reportable incidents and safety advice for the NSW mining industry. To report an incident to the NSW Resources Regulator: phone 1300 814 609 24 hours a day, 7 days a week.

### At a glance

Type	Number
Reportable incident total	39
Summarised incident total	7

### Summarised incidents

Incident type	Summary	Recommendations to industry
Complaint SinNot 2017/00962	The regulator received a notification that non-compliant self-contained self-rescuers (SCSR) may have been in use at two underground coal operations.	<p>Self-contained self rescuers are a critical piece of emergency escape equipment for underground mines. Because of this, units are tested in accordance with specified standards. Rescuers should be performance tested with a 2% tolerance. This is a requirement under the department's mining design guideline on <a href="#">escape breathing apparatus for underground mining applications</a>.</p> <p>If rescuers fail testing at 2% tolerance, all units in that batch are considered non-compliant and must be removed from service immediately.</p> <p>Mine operators are reminded to ensure that all rescuers in use at their mines are tested during the required intervals. Where units have failed, operators must order their removal.</p> <p>Information on testing and compliance is available from the SCSR supplier or from an approved testing facility.</p> <p>For more information, refer to the <a href="#">department's design guideline</a>.</p>

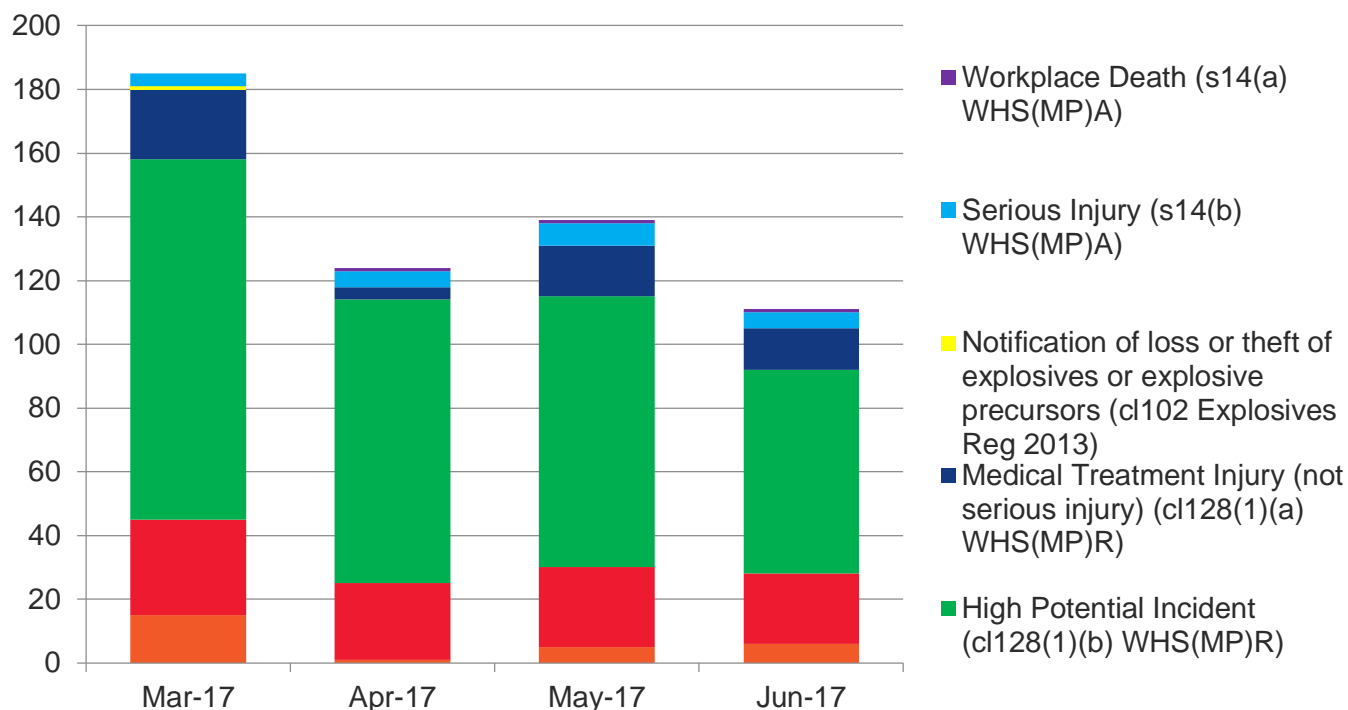
<p>Serious injury SinNot 2017/00954</p>	<p>A surface drill operator on an exploration lease raised a drill rod. As he did so, his hand became caught between the drill rod spanner and a hand-held spanner. This resulted in a severe laceration across his palm and fourth finger. The rod spinner was partially rotated out of the way but the spanner and rod spinner were aligned. This created a pinch point.</p>	<p>This incident is a reminder to:</p> <ul style="list-style-type: none"> <li>• review the design and operational risk assessments associated with exploration drill rigs</li> <li>• ensure that no workers are exposed to hazards associated with the operation of rotating drilling equipment. Numerous entanglement injuries have been reported in recent years.</li> <li>• eliminate or where this is not possible, control the hazards that could result in hand injuries. This may require operators to install effective guarding</li> <li>• ensure safe operating procedures are available and clearly documented</li> <li>• ensure drill rig operators are trained and assessed for competency</li> <li>• use formal systems of pre-operational checks and hazard identification, along with assessing the risk before use.</li> </ul>
<p>Dangerous incident SinNot 2017/00946</p>	<p>A processing plant conveyor stopped when a product bin filled with sand partially collapsed onto the plant.</p>	<p>Mine operators have several obligations in relation to plant in mines:</p> <ul style="list-style-type: none"> <li>• Any structure in a mine that may affect the health and safety of people should be periodically inspected by a competent structural engineer. Inspections should be undertaken at intervals recommended by the structural engineer. Refer to clause 4.5.5 'Inspection and testing of plant' in the department's <a href="#">code of practice: Mechanical engineering control plan</a>. If a structural engineer has not specified a period, inspections should be carried out at two-year intervals.</li> <li>• Steel structures should be designed, fabricated and erected in accordance with Australian Standard 4100 <i>Steel structures</i> or AS 3990 – <i>Mechanical equipment – Steelwork</i> as well as other relevant Australian Standards where appropriate.</li> </ul> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>• Safety Alert: <a href="#">Sudden failure of feed hopper</a></li> <li>• Safety Alert: <a href="#">Structural bin failure</a></li> </ul>
<p>High potential</p>	<p>Methane levels greater than 2%</p>	<p>This incident was preventable. Mines should assess</p>

<p>incident SinNot 2017/00936</p>	<p>were detected in the general body of an underground mine. Power to the panel and an auxiliary fan was tripped when an electrician was calibrating a methane monitor. The loss of power led to the methane build-up. An incorrect methane monitor was placed in bypass, tripping power to the panel. A subsequent issue arose following the power trip in which restoration of power to the panel was delayed for approximately 45 minutes due to a communications fault. This contributed to the gas build-up.</p>	<p>their calibration procedures associated with real-time gas sensors. They should consider:</p> <ul style="list-style-type: none"> <li>• how gas sensors are selected and verified for calibration</li> <li>• the system of placing gas monitors in bypass. There appears to be risks associated with control room officers doing this remotely.</li> <li>• the use of a two-step verification process to ensure the correct sensor is bypassed and not the operational sensor (where dual systems are configured).</li> <li>• using improved engineering controls that 'automatically' confirms (audible or visual) when a sensor is placed in bypass/defeat.</li> <li>• changes to supervisory control and data acquisitions (SCADA) or data logging systems that sound an alarm when a sensor is left in bypass/defeat and re-triggers after a pre-defined time.</li> <li>• how to ensure that trip circuits are periodically checked to test and maintain their level of functional safety.</li> </ul>
<p>High potential incident SinNot 2017/00934</p>	<p>A truck was driving down a decline when it collided with an agitator. The agitator was driving up the decline. The truck driver was not injured but the agitator driver's arm was cut. The truck was slightly damaged and there was considerable damage to the front of the agitator.</p>	<p>Mine operators should consider:</p> <ul style="list-style-type: none"> <li>• a review of communication protocols. In this incident radio congestion played a significant part</li> <li>• reviewing the practice of turning off lights in declines</li> <li>• updating and communicating written traffic management procedures</li> <li>• ensuring drivers are trained and assessed as competent in the site's rules and procedures</li> <li>• the role of engineering in assessing risk and, where necessary, standardising the positioning of lights on vehicles</li> <li>• using collision avoidance and proximity detection systems for both heavy and light vehicles</li> <li>• periodic monitoring of traffic rule compliance on site through unplanned task observations.</li> </ul>
<p>Serious injury SinNot 2017/00933*</p>	<p>A worker's second left finger was amputated and his first left finger was crushed when he was helping to install flexible conveyor train (FCT) modules.</p>	<p>When assembling mechanical components of machinery, mine operators should reinforce the need to carry out a task-specific risk assessment. The risk assessment should identify all potential hazards, including those that may not be obvious.</p>

	<p>The clevises of two sections of the FCT were being aligned with pull lifts. It was reported the worker had his hand resting on the top rail joint, which was the pinch point that trapped his hand.</p>	<p>In this incident, the hazard of the pinch point from the rail was not adequately assessed.</p>
<p>High potential incident SinNot 2017/00931</p>	<p>A gas plant lost power due to an earth leakage trip on an incoming transformer. This resulted in the mine's trigger action response plan (TARP) being activated and a withdrawal of workers from underground. The gas level peaked at 1.96%.</p>	<p>Where an electrical supply is feeding critical mine infrastructure, mine operators should consider the active monitoring and recording of leakage to earth at various locations across the network. This can help electrical staff make priority decisions around maintenance activities and the location of system degradation before tripping.</p> <p>Change management should be followed before altering electrical protection devices, settings, tripping ratios, maintenance test frequencies, alarms and trip levels.</p> <p>Mines need to ensure that when performing insulation testing on electrical networks that they have given due consideration to the voltages used, the duration and what the acceptable minimal levels are.</p> <p>For more information, refer to AS/NZS 4871.1 <i>Electrical equipment for coal mines</i>.</p>

\* The comment to industry contained in SinNot 2017/00933 has been updated from the original publication due to an editorial error.

## Reported incidents by month



Note: While the majority of incidents are reported and recorded within a week of the event, some are notified outside this time period. The incidents in this report therefore have not necessarily occurred in a one week period. All newly recorded incidents, whatever the incident date, are reviewed by the Chief Inspector and senior staff each week. For more comprehensive statistical data refer to our annual performance measures reports.

## Recent publications

- Safety alert: [Non compliant gas monitors](#)

You can find all our incident related publications (that is, safety alerts, safety bulletins, incident information releases, weekly incident summaries and investigation reports) on our website.

### Disclaimer

The information contained in this publication is based on knowledge and understanding at the time of writing. However, because of advances in knowledge, users are reminded of the need to ensure that information on which they rely is up to date and to check the currency of the information with the appropriate officer of NSW Department of Planning and Environment or the user's independent advisor.

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