Weekly incident summary



Week ending 13 September 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

High level summary of emerging trends and our recommendations to operators.

Туре	Number
Reportable incident total	44
Summarised incident total	9

Summarised incidents

Incident type	Summary	Recommendations to industry
Dangerous incident SinNot 2017/01420	While changing the quick detach system (QDS) attachment on a load haul dump, an operator's hand was sprayed with oil from the quick release connectors. When connecting the QDS fitting, the operator misjudged the position and depressed the male QDS fitting sealing device allowing pressurised fluid to be released.	Quick release connections should be fit- for-purpose and have regular maintenance inspections. Maintenance personnel and operators should be competent in their use and inspection. Quick release connections should not be used when the hydraulic system is pressurised. Refer to MDG41 Fluid power system safety.
Dangerous incident SinNot 2017/01452 Dangerous incident SinNot 2017/01441	A driver stopped a truck up at a tip head and applied the park brake. He started to tip and realised the ground was starting to slump. The driver tried unsuccessfully to reverse, then called for help. The truck was later pulled clear. In a separate incident, an articulated tipper rolled over while tipping its load. The prime mover has remained upright.	Mine operators should identify all work activities on mine sites where trucks are used. Consideration should be given to the following risk controls to ensure ground stability and suitability for vehicle operations and to prevent a truck roll: • Tipping areas should be level without cross grades • Tipping areas should be stable and capable of withstanding the truck wheel pressures and not prone to subside • Edge boundaries must be well identified • The recommendations in safety bulletin SB17-01 Industry reports more truck rollover incidents should be considered.

Dangerous incident SinNot 2017/01425

A bubble was identified in the sidewall of a tyre on a 500 tonne truck. The tyre fitter instructed the truck operator to relocate the truck to the tyre bay. When the truck was parked at the tyre bay, the tyre fitter and operator left the immediate area of the tyre. After they left, the tyre failed resulting in a rapid release of air and one piece of sidewall rubber being thrown about 5 m away from the tyre.

An investigation identified a structural wire cord from the shoulder area penetrated the internal wall of the tyre. This caused a bubble between the outside wall of the tyre and the delaminated area, which continued to expand until it failed. Tyres should be checked and repaired in accordance with AS 4457.2-2008 Earthmoving machinery - Off-the-road wheels, rims and tyres - Maintenance and repair – Tyres.

Mines should:

- communicate actions required when a tyre bubble is identified for operators and maintainers
- include management of sidewall bubbles in tyre handling procedures
- establish safe method for the deflation of damaged tyres.

Dangerous incident SinNot 2017/01436

A light vehicle was travelling on a haul road when the driver lost control and the vehicle rolled onto the passenger side. No injuries were reported.

Some factors that may affect operator vision and/or ability to control a vehicle include:

- fog, sunlight, storms or dust
- fatique
- slippery road conditions
- obstructions that affect lines of sight.

Mine operators should consider these items in their principal hazard management plans for roads and other vehicle operating areas, along with fit-for-purpose barriers such as bunding or windrows to prevent uncontrolled vehicles going over embankments.

Drivers should be reminded to travel at speeds suitable for conditions and select and use appropriate equipment and retarders when descending.

High potential incident SinNot 2017/01457

An LHD hit and damaged a methane drainage line resulting in methane being discharged in to the general body roadway of an underground coal mine.

At the time of the incident the mine was undertaking maintenance activities on the methane drainage plant, resulting in the methane range being pressurised.

Mine operators should consider:

- change management processes being applied to work that may have a flow-on impact to other activities at the mine.
- engineering controls for the automatic shutdown of diesel plant should general body methane be

As a result of the damage to the methane range, general body methane levels exceeded 2.0% with a peak reading being identified by a mining official of 3.5% at a workplace inbye of the incident scene while in the process of withdrawing workers from the area.

As the incident progressed, there was then a failure to apply the mine's withdrawal trigger action response plans, resulting in people remaining underground as methane levels increased.

- greater than 1.25%.
- withdrawal conditions being defined in trigger action response plans with key persons such as control room operators being accountable for initiating action(s)
- effective controls to prevent damage to methane drainage water trap installations from passing traffic
- methods to detect and effectively control leakages along segments of the methane range.

Mine operators must review the procedures and conditions in relation to failed plant or trigger events before allowing people to re-enter an underground mine particularly when elevated levels of methane have resulted in the withdrawal of workers from the mine.

Dangerous incident SinNot 2017/01435

A truck dumped coal on the run-of-mine pan close to a bulldozer. The dozer reversed after pushing the load and clipped the truck mirror. The truck and dozer were stopped and the workers' supervisors were informed.

When mobile plant is operating in close proximity, operators should remain in continual communication with each other and maintain an awareness of the other's position.

Mobile plant, including light vehicles, should be operated and parked in accordance with site procedures. Workers should be trained in site-specific procedures.

Regular site safety observations should be performed by supervisors to ensure compliance with site procedures. Collision avoidance and proximity technologies should be considered – MDG 2007 Selection and implementation of collision management systems along with the use of cameras to assist operators by alarming encroachments.

High potential incident SinNot 2017/01445

High winds brought down tree branches on to 66KV power lines. This resulted in a power dip that caused fan motors to trip off at the fan shaft which resulted in workers being evacuated from the mine.

Settings on protection relays for the fan motors were found to be set incorrectly.

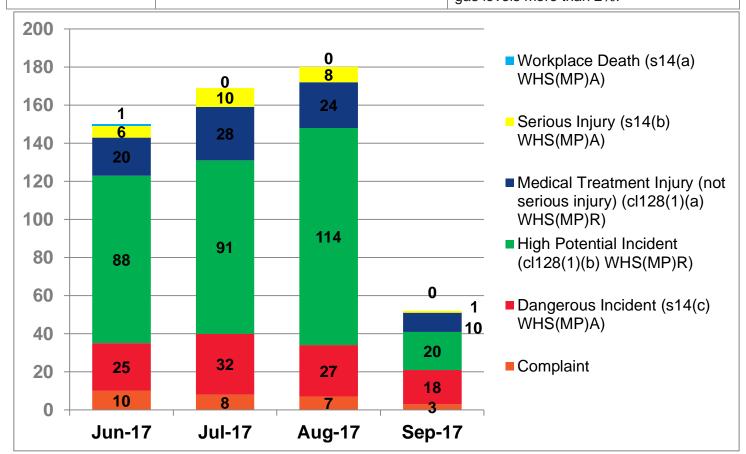
Electrical power supply is critical to the operation of essential infrastructure such as ventilation fans. The effect of this loss of supply should be risk assessed to ensure that suitable controls are identified and provided.

Motor protection relays should be selected, set up and commissioned correctly and maintained by competent personnel to ensure the protection functions correctly when required and is reliable and not subjected to nuisance trips.

High potential incident SinNot 2017/01438

An underground coal mine identified an increasing trend in methane levels in the return roadways of the mine associated with old workings. The mine responded to the increasing trend by implementing a ventilation change to increase ventilation quantity to the affected roadways, however the ventilation change was not timely and methane levels in the roadways peaked at 2.17%.

Ventilation officers are reminded that major barometric falls are a reasonably foreseeable event that should be addressed in the ventilation control plan. Trending should include both the effects of diurnal barometric change as well as major barometric events. To assist in determining barometric trend, barometric monitoring should be installed. ☐ Mine operators are reminded of the effects a falling barometer can have on sealed goaf areas, and hence methane levels in accessible roadways. ☐ Mine operators should prepare appropriate trigger action response plans supported by both realtime and predictive services to understand barometric trend and magnitude and so provide adequate time to allow the implementation of mitigating controls to minimise a potential increase in methane gas levels more than 2%.



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: Response times of gas detectors
- Safety bulletin: Reuse of removable exhaust filters on explosion-protected diesel engines
- Updated guide: Maintenance of competence scheme

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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