# Weekly incident summary



# Week ending 1 November 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	32
Summarised incident total	9

### **Summarised incidents**

Incident type	Summary	Comments
Serious injury SInNot-2017/01731	An operator was driving a light vehicle with the window down and his arm resting on the window sill. While passing another vehicle, his vehicle hit the gutter and in doing so the operator jammed his left arm between the mine wall and the vehicle door (left hand drive vehicle).  The operator then drove the vehicle to where he was given first aid. Initially it looked like the injuries were confined to lacerations and swelling.  The operator drove himself to hospital for X-rays where it was found that he had two fractures to his left arm.  Hazard¹:  Kinetic energy - Velocity vehicles.  Risk:  Harm to people from being crushed.	<ul> <li>Operators and passengers in vehicles should always keep body parts inside vehicles.</li> <li>Vehicles should be operated with the windows up.</li> <li>Supervisors should monitor compliance with mine rules for operating vehicles.</li> <li>Mines should have 'windows up' policy on light vehicles.</li> <li>Mines should have good systems to communicate a change in road conditions to vehicle operators.</li> </ul>

<sup>1</sup> Hazard and risk are not intended to be inclusive

## Dangerous incident SInNot-2017/01730

While a loader was picking up oversize waste from a reject bin and loading it into a 5 tonne tipper, a 1.5 metre fibreglass roof bolt fell out of the bucket, passed through the mesh aperture protecting the truck rear window and lodged under the window sealing rubber.

As the loader emptied its bucket and lifted the bucket up, the fibreglass bolt flexed and struck up, shattering the window.

The truck driver was observed on camera looking at the rear window as it shattered (in response to a hearing a tapping noise generated by the bolt).



Hazard<sup>1</sup>: Gravity.

**Risk:** Harm to people from falling elevated components.

#### **Recommendations:**

- Where fixed guards are used to prevent people from falling or moving objects:
  - the maximum aperture size of the guard should be less than the object size
  - the guard should have sufficient strength to withstand the load imposed by the falling or moving object.
- Risk assessments should consider the potential for falling/flying objects.
- Safety glass should be considered for all windows on vehicles.
- Mines should check rear window guards on tip trucks for this risk.

#### Refer to:

AS 4024.1601 Safety of machinery - Design of controls interlocks and guarding - Guards - General requirements for the design and construction of fixed and movable guards.

# Dangerous incident SInNot-2017/01724

A surface drill was drilling on a pattern in the pit on a slope of approximately 10 degrees. As the operator began tramming, the drill travelled forward down the slope in an uncontrolled movement for approximately 10 metres. The operator parked the drill and put the jacks down to secure the machine.

The wiring harness was found to have been rubbing, and was damaged, underneath the operator's seat.

#### Recommendations:

- Maintenance strategies for braking systems on mobile plant should consider all potential failure modes of the braking system, including faults on on wiring systems
- Braking systems should be inspected, tested and maintained in accordance with the original equipment manufacturer's recommendations.
- Wiring systems must be fitted with short circuit protection and over current protection (refer to clause 32(2)(n) WHS(MPS) Reg)
- Safety critical electrical wiring systems should be designed so faults, including short circuits between different circuits, do not cause unintended operation of machine functions.

#### Refer to:



SB10-03 <u>Mobile plant - safety critical</u> <u>systems</u>

SA06-12 <u>Maintenance of Safety Critical</u> <u>Systems - Braking, Steering & Warning</u> Systems

MDG 15 – Guideline for mobile and transportable equipment for use in mines

**Hazard**<sup>1</sup>: Kinetic energy – Velocity/inertia of vehicle.

**Risk:** Harm to people from unexpected movement of mobile plant.

#### Recommendations:

- Fixed barricading: signs should be provided to prevent access to unsafe areas such as auger holes in the floor.
- Consider the use of 'sleeving' that extends above the maximum water level so the location of the hole is visible.

#### Refer to:

Investigation report – Cobar CSA drowning Report into the death of an underground mine worker

#### Serious injury SInNot-2017/01717

A deputy has stepped into a pumping auger hole while hanging a pump line along the rib. The auger hole was below the surface of the water and was not visible. The hole was about 300 mm in diameter. The deputy's entire leg went into the hole.



**Hazard**<sup>1</sup>: Gravity.

**Risk:** Harm to people from slips trips and falls.

Serious injury SInNot-2017/01713 As a worker was attempting to lift a pump that was fitted with a wire safety cage surrounding it, the pump moved sidewards and cut through the worker's glove resulting in a laceration to his right hand. A grinder had damaged the pump cage two days before, leaving sharp edges, which caused the laceration.

#### Recommendations:

- Plant should not have sharp edges in areas where people may make contact with the plant.
- Repairs to equipment should be assessed at their conclusion for the introduction of any new hazards. In this case, sharp edges were left after grinding and when the pump was

	Hazard <sup>1</sup> : Gravity.  Risk: Harm to people from sharp edges.	relocated exposed the person to the hazard.
Dangerous incident SInNot-2017/01709	A mining rear dump truck hit the centre bund of a haul road.  Hazard¹: Kinetic energy – velocity/inertia vehicles.  Risk: Harm to people from collision.	<ul> <li>Recommendations:</li> <li>Ensure windrows are installed and are of sufficient height to stop mobile plant if it becomes uncontrolled.</li> <li>Review haul road design and site compliance with design rules.</li> <li>Remind operators to drive to conditions.</li> <li>Ensure positive communication of changed road conditions, such as wet roads.</li> <li>Implement fatigue management arrangements and periodically assess for effectiveness.</li> </ul>
Dangerous incident SInNot-2017/01708	An operator detected a fire on a hydraulic shovel. The operator manually initiated the on-board suppression system when the infrared detection cameras identified a heat source. The on-board suppression systems successfully extinguished the fire.  A failed engine turbo oil supply line allowed oil to spray onto adjacent turbo.  Hazard¹: Chemical reaction – fire (fuel, heat, oxygen).  Risk: Harm to people from fire on mobile plant.	<ul> <li>Recommendations:</li> <li>Good maintenance practices are essential in preventing the ignition of combustible fluids from hose or pipe failures.</li> <li>Where practicable, hoses should be segregated from hot surfaces using hard barriers along with the use of non-flammable coolants.</li> <li>Refer to: AS 5062:2016 Fire protection for mobile and transportable equipment.</li> </ul>

#### Dangerous incident SInNot-2017/01700

A tyre on a road-registered truck blew out while reversing.

This caused debris to be ejected from the area around the tyre blowout towards another road-registered truck that was parked alongside the area where the truck was reversing. The operator was sitting in the parked truck with the window down.



## Recommendations:

- Tyre manufacturers should be engaged to assist with identification of causes of tyre failure.
- Regular visual inspections of tyre sidewalls should be done to identify bulges, bubbles, cuts or other damage to ensure risk from tyre failure or blowouts is minimised.

#### Refer to:

AS 4457.2-2008 : Earth-moving machinery - Off-the-road wheels, rims and tyres - Maintenance and repair - tyres

**Hazard**<sup>1</sup>: Pressurised fluids – compressed air

#### Risk:

- Harm to people from the uncontrolled release of compressed air.
- Harm to people from flying debris.

Medical treatment injury SInNot-2017/01699

Repairs were being carried out on a product conveyor. A hot splice was completed earlier in the day with the belt technician finalising the splice using a 180 mm polisher with a tungsten carbide buffing disc.

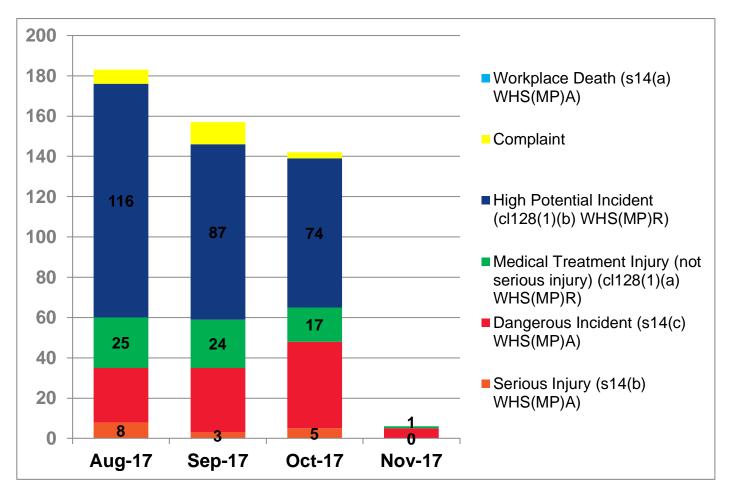
While operating the polisher, the belt technician made contact with the table supporting the conveyor in the area of splice. As the polisher wheel made contact with the table it has changed direction and hit the technician's face, moving across his safety glasses and causing a laceration to his nose. The technician received five stitches to his nose and bruising to his forehead.



**Hazard**<sup>1</sup>: Kinetic energy – moving parts. **Risk:** Harm to people from friction of abrasion.

#### Recommendations:

- Before using hand-held grinders and polishers, where possible consideration should be given to using alternative tools.
- Workers who use hand-held grinders and polishers need to be trained in their correct use and in the potential risks.
- Appropriate personal protective equipment should always be worn.
   Consideration should be given to full face masks.
- Hazard identification should be routinely performed before starting work.
- Mines should periodically check contractor's tools and work practices
- Adequate supervision should be provided for contractors.



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.

#### **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.

Office use only	
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