Week ending 8 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.

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reportable incident total</td>
<td>45</td>
</tr>
<tr>
<td>Summarised incident total</td>
<td>13</td>
</tr>
</tbody>
</table>

Summarised incidents

<table>
<thead>
<tr>
<th>Incident type</th>
<th>Summary</th>
<th>Recommendations to industry</th>
</tr>
</thead>
</table>
| Dangerous incident  | An articulated dump truck rear body rolled onto its side. The operator began tipping a load of rock and saw in his mirror that the second row right hand wheel was coming off the ground. The operator released the hoisting lever and the rear body of the truck rolled over. The cross grade was measured at 1:5. The truck was involved in building an access road. | • Tipping areas need to be level without cross grade.  
• Use level sensors to alert an operator or prohibit tipping on uneven ground.  
• Ensure that tyre pressures are correct and suspension systems are in good condition.  
• Tipping areas should be stable and capable of withstanding the truck wheel pressures and should not be prone to subsidence. |

Refer to: SB17-01 Industry reports more truck rollover incidents  
SA03-01 Articulated dump truck rollovers
<table>
<thead>
<tr>
<th>Dangerous incident</th>
<th>An operator drove a truck out of the pit and in the process of turning the truck around, the truck rolled over. No injuries were reported.</th>
</tr>
</thead>
</table>
| SinNot-2017/01773 | • Trucks should be travelling at appropriate speeds when doing U-turns.  
• Turning areas should be flat with minimal cross grade.  
• Ensure tyre pressures are correct and suspension systems are in good condition.  
• Operator practices should be periodically checked.  

Refer to:  
SB17-01 Industry reports more truck rollover incidents |

<table>
<thead>
<tr>
<th>Serious injury</th>
<th>Two fitters were changing a strut on a mining truck. After completing the work, they began replacing the hub. It was unsecured during this process and came loose. The hub struck one fitter, fracturing his arm and dislocating his knee cap.</th>
</tr>
</thead>
</table>
| SinNot-2017/01770 | • Tradespersons should use correct lifting equipment when working on heavy machine components.  
• Original equipment manufacturer procedures should be followed.  
• Tradespersons should be competent in the activity being carried out and be trained for work on the particular type of plant.  

<table>
<thead>
<tr>
<th>Dangerous incident</th>
<th>A haul truck reversed into a dozer when the truck was backing up. Tyre positions 5 and 6 of the haul truck hit the dozer on the ripper box causing minimal damage. The haul truck operator did not see the dozer.</th>
</tr>
</thead>
</table>
| SinNot-2017/01764 | • There should always be clear, positive communication between mobile plant operators when working in close proximity.  
• The size of designated work areas should be sufficient for the movement of mobile plant.  
• Reversing cameras and proximity detection devices should be used.  
• Sufficient lighting should be provided when working at night.  

<table>
<thead>
<tr>
<th>Dangerous incident</th>
<th>A small fire was reported on an excavator left hand engine. The operator noticed the fire on IR camera screen, shut down the</th>
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<tbody>
<tr>
<td>SinNot-2017/01754</td>
<td>• Good maintenance practices are essential in preventing the ignition of combustible fluids from hose or pipe</td>
</tr>
</tbody>
</table>
engine and put the fire out with a hand-held extinguisher. There was residual oil in the turbo lagging, which was soaked in oil and the fire reignited. The operator put it out again with the fire extinguisher.

There was a loose fitting on the poly-steel braided turbo feed line to the o-ring connection. This was the oil that soaked the turbo lagging. There was mid-life maintenance carried out on the engine about three days previously.

- Where practicable, hoses should be segregated from hot surfaces using hard barriers along with the use of non-flammable coolants.

**Refer to:**
AS 5062:2016 Fire protection for mobile and transportable equipment.

### Dangerous incident
#### SinNot-2017/01753

A fire occurred on a collapsed conveyor return idler on the main truck belt in an underground coal mine.

The outbye deputy smelled smoke and went with another deputy to identify the source. They found fines burning under the collapsed return idler. They put stone dust on the fire, which flared it up. The deputy then went and got a water hose to extinguish the fire.

- Ensure conveyor idlers are designed with the appropriate life for the intended duty.
- Install carbon monoxide monitoring or particulates of combustion sensors to assist in the early detection of a fire. Use appropriate trigger action response plans.
- Ensure that a water source is readily available to quickly extinguish a fire.
- Check defected conveyor idlers in a timely manner and carry out conveyor inspections regularly.
- Consider the recommendations in MDG 1032 and AS/NZS 4024.3611

**Refer to:**
- Mechanical engineering control plan code of practice
- MDG 1032 Guideline for the prevention, early detection and suppression of fires in coal mines
- AS/NZS 4024.3611 Safety of machinery, Conveyors – Belt conveyors for bulk material handing is incorporated into the mechanical engineering control plan code.

### Dangerous incident
#### SinNot-2017/01752

A professional wildlife catcher was engaged by the mine to cull pigeons with a 22 calibre air rifle. The shooter shot a pigeon which fell to the ground. The shooter realised the pigeons wing was only clipped. As he walked toward the pigeon to shoot it again, the rifle dropped and rubbed his leg and a slug fired into the concrete floor. The slug ricocheted off the concrete, past a supervisor and then through a glass door panel then into the CHPP control

A risk assessment must be carried out before a shooting activity occurs at a mine, refer to clause 9 WHS (MPS) Regulation. The risk assessment should consider, but not be limited to:
- the proximity of people in the vicinity of a shooting activity
- the potential for the fired slug to ricochet off objects and to unintended areas or parts of the mine.
<table>
<thead>
<tr>
<th>Date</th>
<th>Incident Description</th>
<th>Recommendations</th>
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</thead>
</table>
| 8 November | Dangerous incident SinNot-2017/01751 A load hall dump (LHD) vehicle, was preparing to dump a load of shot-fired roof material at a nominated surface dump. The LHD travelled up a ramp and turned into the dump site, placing the LHD across the grade of the ramp. Approaching the dump site, the operator began raising the bucket. He brought the LHD to a stop and continued raising the bucket to full height to allow him to tip the load. The operator felt the front off-side (down dip) of the machine subside then the machine tipped over/rolled until the bucket and boom of the machine stabilised on the muck-pile. The operator assessed his position and determined a safe exit from the cab. He climbed over the door and down the top of the machine on the low side then reported the incident.                                                                 | • Articulated loaders should not be tipping on a cross grade when the bucket is lifted and the machine is articulated.  
• Pads and areas where LHD-type vehicles are required to tip should be checked as being suitable by a supervisor.  
• LHD vehicles should be operated within the OEM specified limits, including tipping lines for stability.  
• Training packages should be reviewed for all machinery to ensure that it includes the limitations of the machine.  
• Seat constraints fitted must be worn. |
| 8 November | Dangerous incident SinNot-2017/01743 While driving a shuttle car down a steep grade the operator tried to slow the machine by applying the foot brake. This didn't work, so after trying several other things he pushed the emergency stop button that stopped the machine.                                                                                                                                                                                                                | • Braking systems should be inspected, tested and maintained in accordance with the manufacturer’s information. Inspections should include checking that brake pedals can move easily and are free from contamination or material build-up.  
• Braking systems on shuttle cars hold registered designs. Design changes that affect safety must be registered.  
• Brake linkages should be designed taking into consideration environmental and ergonomic factors. |
| 8 November | Dangerous incident SinNot-2017/01742 A dozer was trammed up a rill between two benches with a height difference of                                                                                                                                                                                                                                                      | • Traversing gradients requires special care when operating dozers.                                                                                                                                                                  |
approximately 4 m. Upon reaching the crest of the rill, the operator steered the dozer to the left as it drove over the windrow on the edge of the bench. The right hand track sank into the loose material, causing the dozer to roll onto its right hand side. The operator was uninjured and was able to safely exit himself from the cab and raise the alarm. He was wearing a seat belt at the time of the incident.

- Dozer operators should carry out an inspection of an area before entering as part of their personal risk assessment.
- Dozer operators should always wear seat belts.
- Consider tilt alarms to alert operator when excessive cross grades occur.

Refer to:

*MDG 28 Safety requirements for coal stockpiles and reclaim tunnels*

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**Dangerous incident SinNot-2017/01741**

An operator of an underground LHD was pushing an auxiliary fan around a corner when it rode up on a cable boat frame. This put the fan up on one wheel. The operator stopped pushing and tried to pull the fan back off the cable boat. During this, the fan rolled onto its side.

- Panel equipment should not be stored in close vicinity to an intersection.
- Hazard assessments should consider all activities such as the task of reversing fan trailers around the corner of intersections and uneven floor.
- Consider previous shift job preparation. In this case the positioning of the panel feeder in the belt road just inbye of the intersection (not allowing access to tow the fan into) forced the fan to be reversed around the corner.
- Ensure no go zones are established around mobile plant.

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**Dangerous incident SinNot-2017/01740**

A fitter was doing some fault finding on an integrated tool carrier that could not be started. He had moved some cables when he thought he heard some electrical activity and called out to the operator in the cabin to start the engine. The operator

- Before working or fault finding on mobile plant, a thorough understanding of the brake system functionality is required. In this instance the park brake was not manually applied. The park brake
cranked the engine and the machine suddenly lurched forward catching the fitter’s hand between the rear tyre and the mud guard. The integrated tool carrier was moved before it was realised the scene had to be preserved. The machine was left on the main decline.

| Applied automatically, which meant it disengaged automatically.
| Potential hazards associated with fault finding should be considered in a task hazard analysis (Eg 'Take 5') with controls identified.
| Inspection, testing and maintenance on mobile plant should be done by competent people in accordance with the OEM information.

| Hazardous incident | While carrying out a breakdown maintenance task with the fitter on a continuous miner roof drill rig solenoid, an electrician was dowsed in hydraulic oil. A hydraulic hose was disconnected by the fitter before the incident, however the hose was not capped. During testing, the hose was flipped around releasing a large amount of oil, some of which went into the electrician’s eyes.
| Mine operators should review all maintenance procedures to include correct isolation.
| Supervisors should complete planned task observations during maintenance work.
| Maintenance personnel should fully understand and comply with work procedures.

Refer to:
- **MDG 41 Guideline for fluid power system safety at mines**
- **Mechanical engineering control plan code of practice**

1 Hazard, risk and existing control are not intended to be inclusive

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

- Report into the serious injury of an operator at Mannering Colliery

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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<tbody>
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<td>RM8 reference</td>
<td>PUB17/790</td>
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<tr>
<td>Mine safety reference</td>
<td>ISR 17-44</td>
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<tr>
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<td>9 November 2017</td>
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