

# Serious accidents and high potential incidents

## Mining and quarrying

### Compilation of reports for October 2010

#### Fall of Person (1)

- A worker injured his back when he fell off a flat bed truck while tying down a load.

#### Fall of Equipment (12)

- A T25 Franna crane tipped on its side as it was lowering a 6 tonne load into position.
- A 20 tonne Franna crane tipped on its side while erecting a five tonne concrete power pole.
- The tie down chains restraining a Komatsu 475 dozer on a low loader broke when one side of the low loader dropped rapidly after a hydraulic hose failed. The dozer slid sideways onto the ground.
- The 50kg dirt door in a dragline house fell from its location five metres onto the ground.
- The eyelet on the sideways alignment ram on an Atlas Copco ROC L8 drill rig failed resulting in the boom falling to the ground.
- A section of a mobile Precision Screens stacker conveyor, while being folded into its transport position, fell to the ground, narrowly missing a worker, when a locating pin detached from the holding brackets.
- A powered roof support toppled onto its side in the longwall maingate. A worker standing on the support foot platform fell over while three other workers standing nearby were struck by the attached hydraulic hoses and were knocked to the ground.
- A rapid bolting rig mounted on a longwall armoured face conveyor fell over because the retaining plate had not been installed. Three workers who were training on the rig sustained minor injuries.

#### Fall of Ground (9)

- A worker was injured when a piece of rock fell from the rib and struck him on the forearm while he was rock bolting in the longwall maingate.
- While tensioning a rockbolt a worker sustained bruising and minor abrasions when he was struck on the lower back by a piece of rib coal which fell between the rib protector and the roof bolter mounted on the continuous miner.
- During a stope firing a rock the size of a basketball fell from the back of an access decline which was bolted but not meshed.
- A section of endwall in coal open pit collapsed close to the dig face.
- A large fall of sand from the mining face in a dredge pond generated a wave on the pond which overturned one of the access float lines and a light vehicle parked on the access ramp.

#### Mechanical (12)

- After completing a lift of a digger cylinder the hook on a Franna crane has swung and hit the excavator's cabin window.
- While tramping a dozer the brakes have suddenly applied. The operator fell forward hitting his head on the dash.
- During pre-start checks on a Joy 12CM 32B continuous miner the tail slew function activated unexpectedly.
- The cab of an O&K RH170 digger broke away from its mounts and slumped forward after a large rock was forced under the cab.
- While attempting to retrieve a bogged Cat 793 dump truck the towing sling between the truck and the Cat D11 dozer broke throwing components some distance away.
- While fitting a new tyre to a Volvo A40E articulated dump truck the tyre fitter became trapped between the tyre that was being carried on the fork lift tynes and the wheel rim that was still on the truck. He was taken to hospital suffering from soft tissue injuries to his chest.

#### Vehicle – Collision (15)

- A Cat 16G grader reversed into a parked Cat 777 Water Cart. The impact caused an electrical short circuit and a resultant small fire on the grader.
- Two fitters working on a Cat 16H grader which had broken down in the circuit had to run to safety when a Cat 785 dump truck approached on the same side of the grader as they were working on.
- A rear dump truck was reversing under a digger bucket when another dump truck came into the pit and clipped the off-side of the reversing truck. Handrails on both trucks were damaged.
- A Cat 793 dump truck reversed into the front LHS of a parked Cat 793 dump truck damaging the air box of the parked truck.
- As a Komatsu 830E dump truck left the Go Line it came into contact with a parked light vehicle.
- An Hitachi 780 loader, with the bucket raised about a metre, struck the side of a light vehicle as the loader was manoeuvring in the workshop area.

#### Vehicle – Loss of Control (13)

- A light vehicle travelling down a ramp lost traction and veered into the bund and rolled on its side.
- When the driver of a Cat 789C dump truck leant over to pick up a water bottle the truck veered to the left and struck a bund.

( ) The number in brackets next to each category heading is the total number of accidents and incidents reported for that category.

- As a light vehicle slowed to take a corner the left hand wheel separated from the hub.
- An Eimco 130 loader moved over a metre after the operator left the vehicle without applying the park brake despite the doors being fitted with two interlocks.
- The operator of a loaded Cat 777B dump truck applied the retarder as he approached an intersection. The retarder did not hold the machine and it rolled 16 metres through the intersection and stopped after the service brake was applied.
- When the operator of a Cat 769 water truck, which had been parked on the pit floor ramp, released the brakes of the truck it travelled uncontrolled down the ramp and into water in the bottom of the pit.
- A loaded Cat 777 dump truck was descending a ramp when it lost the retarder function and changed from first into second gear. The operator applied the emergency brake and drove into the bund on the pit wall.
- A light vehicle lost steering while turning off the haul road when the tie rod detached.

### Explosion (16)

- The flameproof headlight assembly on an ABM20 continuous miner was found damaged.
- Damage to a longwall 110 volt primary lighting cable resulted in the exposure of the conductors.
- When a shuttle car drove over its trailing cable the conductors were exposed.
- The flameproof integrity of a cable reel slip ring enclosure on a shuttle car was compromised when the cover was incorrectly installed.
- An excavator was found to be digging close to a loaded bench due to the incorrect placement of safety bund at two metres instead of ten metres.
- While charging holes on a bench the damaged rear crash bar on an explosives MMU truck snagged two tied off downlines in a loaded hole.

### Fire (32)

- A fire occurred on a Cat 789 dump truck after a turbo failure. The on board fire suppression system and a hand held fire extinguisher were used to extinguish the fire.
- When a hydraulic hose failed on a Reich production drill rig oil sprayed onto the hot exhaust manifold and ignited.
- A wheel motor fire in a Komatsu 830E rear dump truck resulted in the position 3 & 4 tyres deflating after their valve stems burnt off.
- A small fire started beneath the passenger seat in a Cat 777 dump truck due to a short in the A/C fan.
- A small fire started in the battery box area of a Cat 777D water truck when the battery terminal clamp dislodged and arced out on the terminal.
- An Atlas Copco air compressor on a production drill rig caught fire.
- When a worker went to adjust the hand piece of an oxy torch which he had just lit the connection from the hose to the handle blew off and both his hands were burnt.

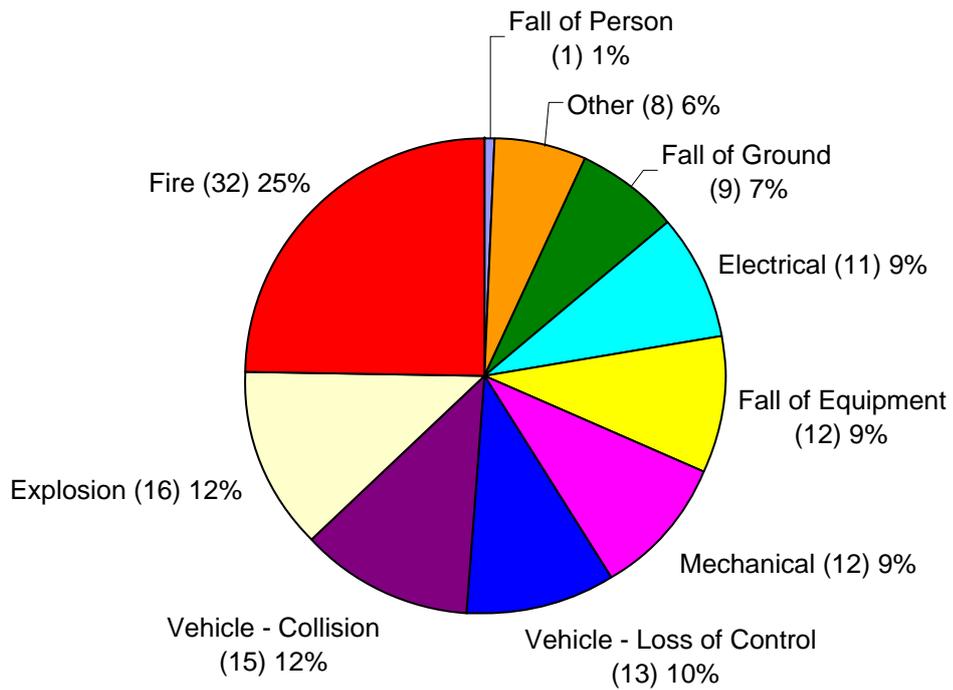
- A fire started in the engine bay of a grader after an electrical short occurred caused by an electrical cable rubbing on a copper pipe.
- A fire started in the engine bay of a Cat D10T dozer after a hydraulic hose burst and sprayed oil onto the turbo.
- A small fire started in the engine bay of a Getman explosives charge car.
- A combination of the on-board fire suppression a hand held fire extinguisher was required to extinguish a fire on an underground Cat 2900 loader.
- The smell of smoke from an electrical fault on the motor of an underground mine dewatering pump resulted in the mine workers evacuating to the refuge bays.

### Electrical (11)

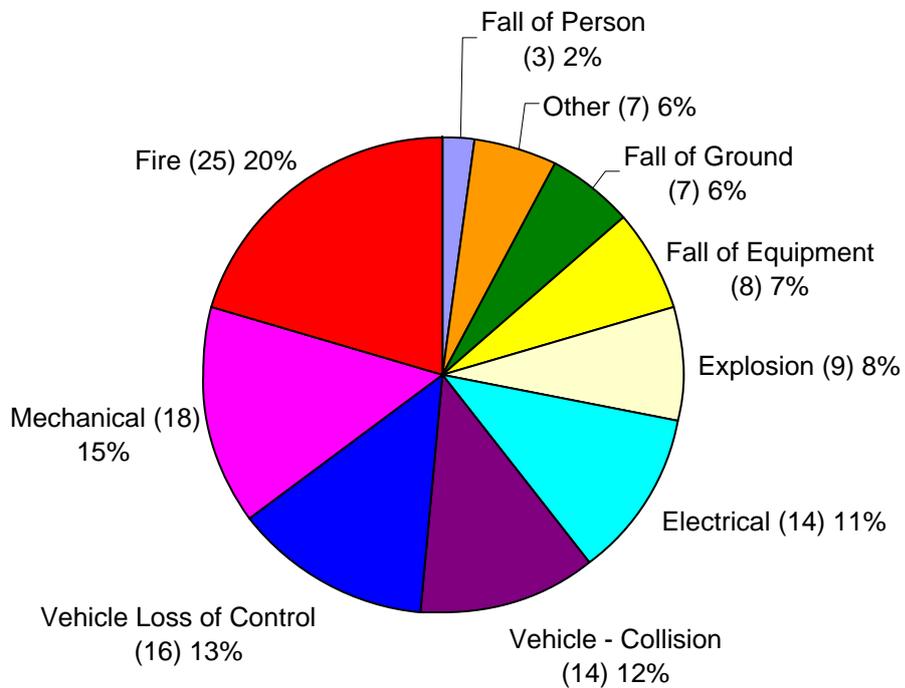
- An operator used his foot to reposition the cover of the dead man switch on a raw coal stacker. The incoming 110Volt wire broke and came into contact with the earthing system. An arc flash was seen and the operator was treated for a suspected electric shock.
- A faulty power board resulted in a worker receiving an electric shock when he touched a diesel particulate test rig set up in a surface workshop. Two fitters who then relocated the rig and an electrician who came to investigate also received electric shocks.
- While cleaning down a conveyor tower to remove redundant cable the power tripped. An incorrectly terminated live redundant cable located in a metal conduit had shorted out when it became wet.
- An electrician was identifying redundant cables in a process plant utilising site drawings. He identified a redundant cable and tested it for dead at the supply end. He then went to the field end and as he commenced terminating the cable an arc flash occurred and the power tripped.
- A light vehicle and cable puller were being used to move a dragline cable. The cable puller was not correctly fitted to the cable and cut into the cable whilst it was being pulled, exposing the conductors.
- A worker using a caddy welder received an electric shock when he grabbed the welding rod.

### Other (8)

- When a supervisor entered an unventilated drive his light vehicle stalled. A gas reading taken later showed an O<sub>2</sub> level of less than 14.6% in the drive.
- A blast guard was exposed to fumes after a shot was fired in a coal open cut.
- During an emergency response exercise an SSR90 self contained self rescuer malfunctioned due to a manufacturing fault.
- After normal end of shift firing dust and firing fumes came into the underground workshop where two fitters were working.
- A boilermaker was hard facing a loader bucket when a hot piece of molten metal dripped into his boot causing burns to his foot.



**Figure 1: October 2010 Incidents (total 129) by Category**



**Figure 2: Twelve Month Rolling Average (120 incidents/month) by Category**