

Serious accidents and high potential incidents

Mining and quarrying

Compilation of reports for August 2011

Fall of Person (2)

- A worker was climbing a ladder to inspect a valve located 2m off the ground when the ladder slipped from under him and he fell to the ground. He sustained a fractured elbow.

Fall of Equipment/Material (18)

- The off side rear wheel of a Cat 793 dump truck went through the windrow on a dump tip head when the driver reversed at an angle.
- An inrush of about 100m³ of waste material from a previously backfilled vent rise occurred as a loader was driving past.
- A 700kg load of carbon in a 1t rated bulk bag was being lifted with a crane when the straps broke causing the load to fall a distance of 10 m. The bags being used for this activity were used feed lot bags purchased second hand.
- A Komatsu WA 480 stemming loader was operating close to the edge in a 12m high bench when one front wheel went past the edge.
- A Trades Assistant suffered a crush injury when a 1.2t mill wear plate he was removing slid and trapped his thigh against the side casing.
- A Komatsu 450LC excavator slid out and toppled off the bench falling 4m and coming to rest upside down with the operator still in the cabin. The excavator boom was at full reach and full depth at the time of the incident.
- While conducting tests on a gantry crane a piece of grid mesh flooring dislodged and fell 19m landing on the mill floor below.
- A drill operator was tramming the drill with the rod extender and reamer at the top of the tower when the reamer assembly became undone and fell on the drill deck missing the operator cabin.

Fall of Ground (6)

- A loader operator in the pit noticed a change in the strata of the end wall. All equipment and personnel were withdrawn from the pit and approximately fifteen minutes later the end wall failed.
- A rock fall occurred at an intersection at the bottom of an access drift resulting in the loss of one of the escapeways from the mine.
- While meshing a section of rib a large piece of rib coal fell over the top of the mesh and struck a worker on the foot. The rock cut the top of his foot and fractured the metatarsal bones.

Mechanical (18)

- While inflating a Komatsu 785 dump truck tyre, the wheel rim separated propelling the flange, bead seat band and lock ring some distance.
- When a salvage pack emulsion pump was started after maintenance the hose whipped splashing emulsion around at 150bar pressure. The fitter was medically examined for suspected injection injuries.
- During the recovery of a longwall roof support DA cylinder, the cylinder overbalanced jamming the worker's foot between the cylinder and the armoured face conveyor.
- While undoing a sensor for fault diagnosis on a Kress coal hauler, a fitter was exposed to hydraulic oil under pressure resulting in a non-injection type abrasion injury to his finger.
- While relocating a drill rig, a worker used a 2t chain block hooked onto a lifting eye that was screwed onto a roof bolt to lift the drill rig into position. When he flicked the lever to lower the load, the roof bolt failed at the shear pin area propelling the chain block into the worker's right shoulder.

Vehicle – Collision (16)

- When an Eimco loader fitted with a duckbill attachment was put into reverse it rolled forward first before the torque converter took up the pressure. It struck and crushed the ankle of a worker who was standing in front of the loader.
- Fitters had just repaired a Cat R2900 loader and were sitting in their light vehicle about to leave when the loader reversed into the front of their vehicle.
- A forklift was leaving a level when it collided with a light vehicle travelling down the decline. The forks pierced the passenger door low down and went under the chassis.
- A Cat D9 dozer which was pushing on a dump reversed into a Cat 789 dump truck as it was turning into position to dump its load.
- A driftrunner stopped at a crosscut and then reversed when the operator saw a loader approaching. The loader collided with the driftrunner. When the operator got out to see what he had hit, a second loader, carrying stonedusting equipment, drove up behind and collided with the first loader.

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

Vehicle – Loss of Control (39)

- A 16 tonne Hyster forklift carrying a cable reel rolled back 30m and collided with some equipment after the operator got off the forklift to secure a loose plug on the cable reel.
- A Cat 651 scraper veered off a haul road which was under construction and tipped over onto its side.
- The operator of a Bucyrus electric dump truck took 60m to stop, including passing through a stop sign, after the retarder failed to activate.
- Towards the end of nightshift a Cat 793 dump truck operator had a micro sleep and drove into the bund.
- The operator of an empty Cat 793 dump truck lost control of his truck and slid for 20m on section of road that had just been spot watered.
- A wheel assembly fell off a recently refurbished Cat 16H grader while it was travelling on a ramp.
- The operator of a Cat 777D water truck was watering a ramp. The truck was travelling down the ramp towards the dig face when the brakes failed to slow the truck which continued down the ramp and drove into and up the dig face. It ended up resting on its rear wheels and the back end of the water tank.
- A grader moved about 10m from its parked position on the go line at end of shift after it had been left to run down.
- After a shower of rain a Cat 789 dump truck slid for approx 30m as it drove down a ramp.
- An empty Cat 777D dump truck lost traction and skidded for about 15m before stopping at 90° across the ramp.
- A Cat 773 water truck operator had just watered a ramp and was coming back down when he lost traction and control near the bottom of the ramp. The vehicle came to a stop with the front wheels on top of the safety bund.

Explosion (10)

- During continuous miner operations a cracking noise was heard and sparks seen coming from the cable supplying the driver's side conveyor motor.
- An outburst event occurred at an underground coal mine as the continuous miner approached a surface to in-seam gas drainage hole. Coal was ejected from the face and methane levels exceeded 2.5%. All workers were withdrawn from the area.
- A shuttle car started to roll forward due to the grade. The operator was unable to apply the brakes because a piece of coal was jammed under the pedal. The shuttle car struck the rib and the outrigger on the car severed the cable.
- During routine maintenance, plastic caps were found over 5 x 110V lighting outlets on a longwall instead of flameproof caps.
- Carbon monoxide build up in excess of site limits in the goaf of a longwall triggered the withdrawal of workers from the mine.

Fire (40)

- A worker was burning rubbish when an aerosol can exploded resulting in burns to his face.
- Both wheel motors on a Komatsu 830E dump truck caught fire. The fires were extinguished by a water truck and a 300m exclusion zone established.
- During gouging and welding of cracks on the boom of a Liebherr R996 excavator a fire occurred causing significant damage. Hand held extinguishers didn't extinguish the fire and the water truck couldn't respond because the access wasn't trafficable after recent heavy rain.
- While breaking out drill rods a hydraulic hose ruptured on the head of a Reeddrill SKS drill rig spraying oil onto the hot engine, resulting in a small fire. The fire suppression was activated and extinguished the fire.
- A hydraulic hose burst spraying oil onto the top of the engine of a Liebherr 996 excavator. The oil ran down and ignited on the exhaust manifold. The fire was extinguished with on board suppression.
- A fire started in the engine bay of a Cat 16H grader after a short circuit at a battery terminal. The fire suppression was activated but failed to extinguish the fire due to some of the nozzles not firing. The fire was finally extinguished with hand held extinguishers.
- A Boilermaker was welding a handrail on a Liebherr 994-200 excavator when sparks ignited grease and coal dust around the tank and radiators in the counterweight area. The fire was extinguished with a hand held extinguisher.
- The fuel line on a Cat D10T dozer rubbed through and sprayed fuel onto the hot manifold resulting in a small fire. The dozer operator shut the machine down and extinguished the fire.
- After an overburden pre-split shot one of the holes was found to have caught fire. The area was barricaded and the hole was left to burn itself out.

Electrical (14)

- While electricians were testing control cables inside a motor starter a control cable was removed from a terminal strip and during testing an electrician received an electric shock.
- A worker received an electric shock from an overhead crane pendant. The pendant was wet from rain.
- When water entered an MCC it shorted out the 415Volt busbar and caused an arc blast which dislodged the front door of the installation. The fire detection system operated and contained the damage to one cell.
- During a dragline shutdown, an electrical worker cut through a live lighting cable causing the power to trip.
- During inspection of a speed sensor located at the tail end of a conveyor the sensor was buried in coal, which was hosed away. The worker received an electric shock when placed his fingers between detecting tabs on the tail pulley and the face of the sensor.

Other (2)

- A level 3 fume event occurred after a blast. Fume travelled beyond the 1km exclusion zone and affected workers carrying out maintenance on a dragline a further 0.5km away.

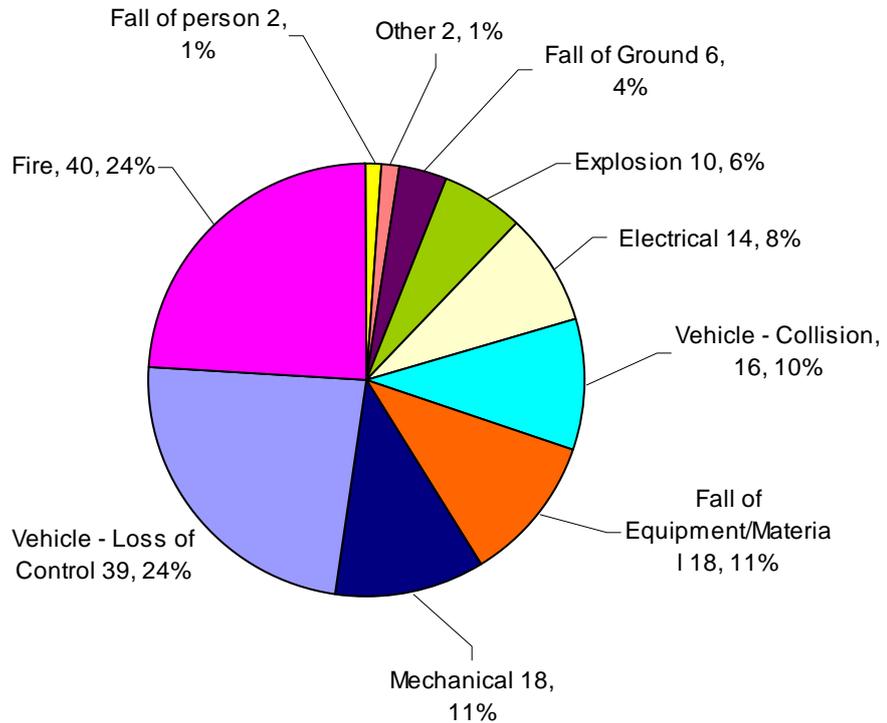


Figure 1: August 2011 Incidents (total 165) by Category

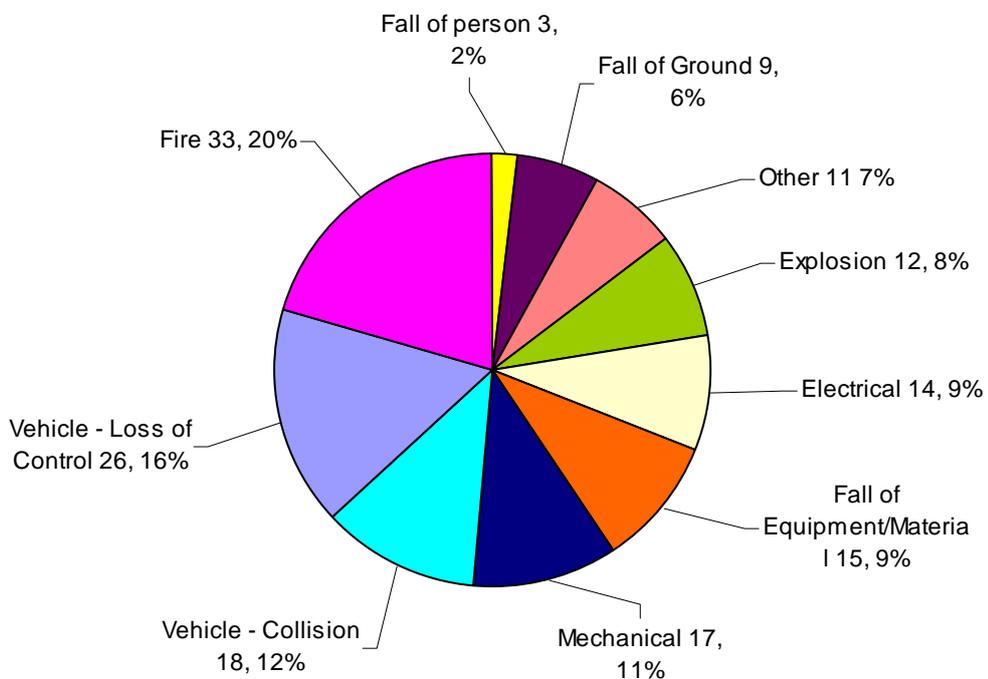


Figure 2: Twelve Month Rolling Average (158 incidents/month) by Category