

Serious accidents and high potential incidents

Mining and quarrying

Compilation of reports for February 2011

Fall of Person (3)

- A worker was washing his light vehicle when he slipped and fell 1.5m between the wash down ramps dislocating his shoulder.
- The driver of a Cat 740 articulated dump truck fell 2.5m from the cab access platform ladder over the handrail to the ground. He fractured his ribs, vertebrae and pelvis.

Fall of Equipment (22)

- A light vehicle was elevated on a Molnar four post vehicle hoist and then the front of the vehicle raised a further 400mm on a hydraulic jacking beam. The beam detached from the hoist ramp support rails and fell to the floor causing the front of the vehicle to drop onto the hoist ramps.
- The boom point sheaves tore off a BE1370 dragline boom and fell onto the stockpile while it was dumping. The ropes fell next to the cab.
- A one tonne stonedust bag fell from its supporting eyebolt above a hopper when a worker twisted the bag to reposition it. The worker's arm was caught between the bag and the mesh on top of the hopper.
- A Terex RH 120 excavator lost traction as it trammed up the loading ramp of a Bosich float and slid about 2m to the right.
- A 120m length of 1m diameter modular polyethylene ladderway fell 10m to the bottom of an escape raise as it was being lowered into position when the sheave assembly failed.
- A section of 250mm diameter poly pipe containing concentrate slurry fell onto a walkway when two pipe supports failed.
- An Hitachi EX3500 excavator was manoeuvring on a 6m bench when one track went over the side of the bench. The operator was able to lower the bucket and stabilise the excavator.
- An operator reversed the rear of his Cat 740 articulated dump truck up and onto a stockpile. When he raised the body it rolled onto its side.
- The operator exited the cab of a Cat 2900 loader and went under the raised and unsupported bucket to clean the lights.

Fall of Ground (4)

- A roof fall in an intersection of an underground coal mine followed an inrush of water through the roadways and already fractured roof strata.
- A 25m long section of rib slumped in an underground coal mine roadway.

- About 300kg of rock fell from the back of a drive where a cablebolting rig had been working.
- Four tonnes of rock fell from the back of an intersection.

Mechanical (15)

- While coupling a new rod on the drill string of a UDR 1000 surface drill rig the driller's offside used his right foot to align the rods. The jaw clamp closed on his foot injuring his toes.
- An Omega 16 tonne forklift was removing a stack of poly pipe from a semi trailer when the forklift over balanced lifting the rear steer wheels off the ground. The stack of pipes fell off the forks and the rear wheels fell back to the ground.
- A supervisor and two fitters were about to commence chassis repairs on a Cat 773 water truck when the position 5 tyre ruptured. The three workers were struck by dirt thrown up by the resultant air blast.
- A catastrophic tyre failure occurred on the trailer of a Cat 777 bottom dump truck while the operator was checking the pressures of the tyres on the other side of the truck.
- The inner wall of the position 6 tyre on a Cat 789 dump truck ruptured while the truck was parked up during a crib break. A piece of rubber from the tyre was thrown 15m from the failure point.
- The position 5 tyre on a Komatsu HD1500 dump truck started to smoke and caught alight while it was being monitored for a possible tread separation. An exclusion zone was established and the fire monitored from a safe distance.
- A worker was hammering a steel sleeve into a housing when a steel splinter flew from the hammer and lodged in his forearm.

Vehicle – Collision (20)

- A Cat D10 dozer reversed into a Cat 789 dump truck which was waiting on the dump tip head.
- Two fitters stood between two Cat 793 dump trucks while attempting to jump start on of them.
- A light vehicle travelled in the wrong direction along a one way haul road until it met a dump truck. Both vehicles took evasive action to avoid a collision.
- A tradesman boarded a Cat 793C dump truck to diagnose a fault and asked the operator to drive the truck as part of the diagnosis. The truck moved off from its park, turned right and drove over the tray of the tradesman's light vehicle.
- A water truck collided with a light vehicle while passing on a gravel road.

- The tyres of a Komatsu HD1500 dump truck clipped the edge of the blade of a Cat 16H grader as the truck was overtaking the grader which was working on the haulroad.
- After the temporary closure of a main decline had been announced over Pitram a Manitou forklift parked just off the decline with the basket raised so that the workers could access the back of the decline. Shortly after two trucks came down the decline and passed under the elevated basket.

Vehicle – Loss of Control (35)

- While travelling on a haul road both B double trailers attached to a C510 Kenworth truck rolled over.
- The operator of a Cat 797B dump truck lost control of the truck while travelling down a recently watered ramp and spun around 180 degrees.
- A light vehicle which had been left parked on a dragline access ramp rolled down the ramp and hit the dragline tub.
- An Eimco 130 loader fitted with a lift basket and carrying four workers slid down a 1:4 decline about 60m before stopping.
- A Cat 773 jumbo service truck lost traction on a watered ramp, slid and rolled over.
- The tub on a Cat 740 articulated dump truck overturned when the truck lost traction while turning a sweeping bend at the bottom of a ramp.
- A Cat 785 dump truck tipped on its side after skidding while travelling down a watered ramp.
- A loaded Cat 777 dump truck lost control, while turning a corner at a recently watered haulroad intersection and ran into the bund.
- While a fitter was in the cab of a Cat 773 water cart conducting brake testing the truck has rolled back approximately 17m and contacted a light vehicle.
- A loaded Cat 777C was travelling down a ramp to a dump when it went too wide on a corner, drove up onto the safety bund and rolled onto its side.
- As a Cat 785C dump truck was travelling down a spot watered ramp the truck slid when the retarder was applied and the wheels locked up.

Explosion (12)

- During maintenance the flameproof integrity of a driftrunner was found to have been breached at the joint on the exhaust pipe between the scrubber tank and the crossover purifier.
- As a shuttle car approached the bootend the cable outrigger struck the rib crushing the power cable and causing an arc flash.
- The power cable conductors on a continuous were exposed when the cable was jammed between the steps and frame of the miner.
- After a blast five workers were found to be in an office block within the 1000m exclusion zone.
- When molten slag was tipped on wet ground in a smelter a steam explosion occurred sending slag fragments flying into the vicinity of workers.

Fire (48)

- While a fitter was soldering a wire near the injectors of a dozer fuel soaked material has ignited causing a flash which singed his beard.
- A boilermaker was brazing the sump of an Hitachi 30 tonne excavator when residual oil in the sump ignited and caused a flare. The boilermaker suffered burns to his hands chin, lip and right ear.
- When an engine cylinder failed on a Cat D10 dozer oil hit the turbo and ignited.
- A fire occurred in the engine bay of a Drilltech D90K overburden drill after a hydraulic hose burst and sprayed oil on the exhaust.
- A fire started in a Komatsu PC1100 excavator engulfing the rear of the machine. The operator activated the on board fire suppression and evacuated the excavator. The water truck was used to finally extinguish the fire.
- A fire occurred on a Cat R1700 underground loader due to a crack in the fuel tank.
- A fire occurred on a Cat AD40 water truck on an underground decline.
- A fire started around the bag spike in a xanthate mixing tank as a result of an accumulation of residual xanthate.
- An isolation switch shorted out on a water pump causing sparks which ignited oil on the surface of the filter hoses of the pump.
- Fire occurred in the control panel of a Palfinger crane fitted to an overburden drill rig.

Electrical (17)

- A flashover occurred within a cubicle of a dragline substation. The 66kV electrical protection operated to clear the fault.
- A boilermaker received an electric shock while setting up a profile cutter in the tray of a haul truck when he sat on the tray and touched the cutter. At the time his clothes and gloves were saturated with perspiration.
- A star picket was found to have been driven into a 415V cable after a worker removed the star picket and heard a popping sound as a fault was created.
- During routine maintenance of a conveyor motor three of four mounting bolts for the junction box were found sheared which exposed the conductors to the motor.
- 11kV cabling associated with a control transformer of a transportable substation failed causing an explosion and flashover to occur.
- The door of an 11kV cubicle was blown open after an arc flash was generated from the insulator tracking due to moisture. The earth fault propagated into a phase to phase fault before the electrical protection cleared the fault.
- A worker received an electric shock when he used a switch on a control box to activate a slurry tank dump valve. Slurry had covered and also entered the control box.

Other (13)

- A level 4 fume event occurred after an overburden shot. The fume breached the exclusion zone and blast guards were moved to avoid exposure.
- During a routine inspection of the surface above a longwall block for mapping of subsidence a sink hole was found containing water. The longwall crew were withdrawn to a place of safety.

- Prolonged heavy rain resulted in approximately 1.1MI of water entered an underground mine via the portal and vent raise and accumulated at the bottom of the decline.
- A continuous miner unexpectedly intersected a surface to seam borehole.

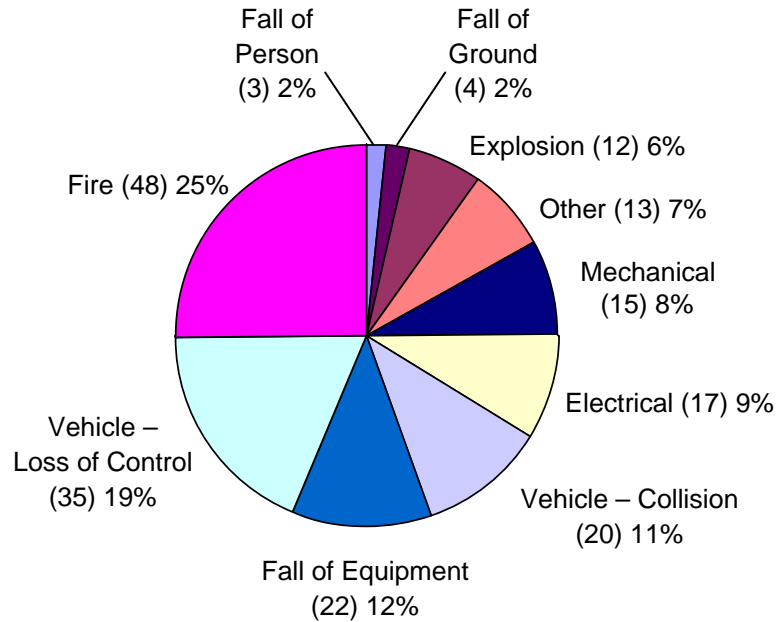


Figure 1: February 2011 Incidents (total 189) by Category

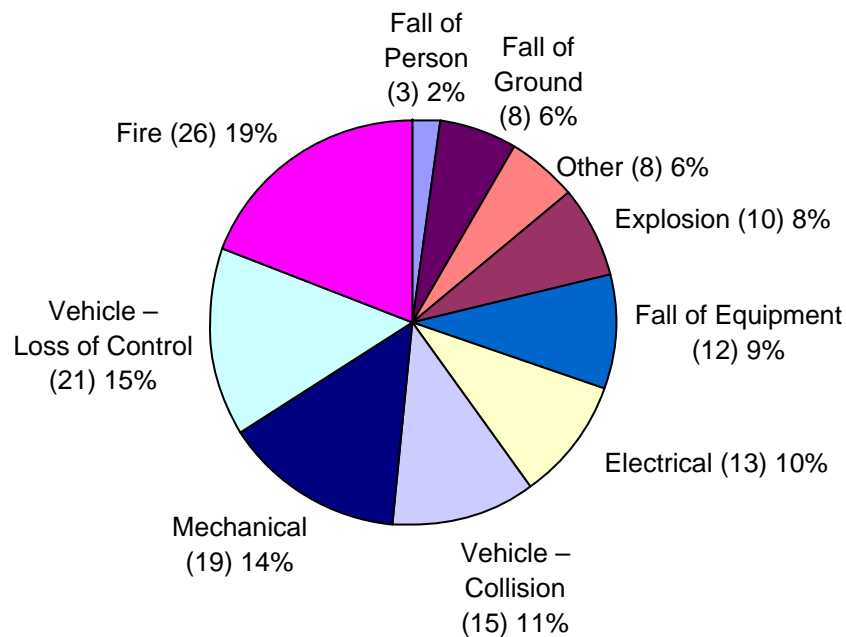


Figure 2: Twelve Month Rolling Average (135 incidents/month) by Category