

Serious accidents and high potential incidents

Mining and quarrying

Compilation of reports for March 2011

Fall of Person (3)

- An employee slipped on a wet driveway, striking his head on the concrete. He suffered a head wound requiring eight stitches.
- A two deck shaft sinking stage carrying four workers was being lowered in a shaft when one side of the stage caught on formwork. The stage dropped approximately 200 mm when it released from the hang-up.

Fall of Equipment (16)

- A 30 tonne excavator which was parked 15-20m back from the crest of a highwall fell into the pit when a section of the highwall failed.
- A load being lifted by a crane dropped 300 mm when the anchor pin for the lift rope on the crane hook fell out.
- A Cat 789 rear dump truck slid along the edge of a dump after about 50m of the edge of the dump slumped away.
- The position 5&6 tyres of a Cat 789C ended up on top of the bund at a dump when it was reversing in to tip.
- While loading a Komatsu WA470 loader onto a trailer, it slipped sideways off the deck.
- An operator, clearing a blockage in a cement silo chute, had partially removed an inspection plate when about 10 tonne of cement unexpectedly dropped.
- A 130 metre length of 315mm diameter poly dewatering line fell from a pit wall and onto the haul road.
- A worker was in an IT basket attached to a Volvo 120 loader when there was a loss of hydraulic pressure and the basket fell to the floor.
- While reversing during an overburden dozer push a Cat D11T dozer slid off a ridge of material and down a 6m embankment before rolling onto its side.

Fall of Ground (8)

- A significant volume of material in a faulted section of a highwall slumped onto a ramp.
- While a Komatsu 930E rear dump truck was being loaded, rock rilled from the face damaging the truck's tray and building up against the rear tyres.
- The operator of a continuous miner suffered a broken ankle when a piece coal fell from the rib and struck the driver's side platform.
- While bolting and meshing a development heading a drill jumbo offsider was struck on the hand by

rock which fell from between the unsupported mesh overlap as he was changing a drill bit.

Mechanical (21)

- A worker was using an impact gun when the 25mm diameter air hose blew off the minsup fitting. An incorrect hose clamp had been used to attach the hose to the fitting.
- While performing a chain tension check on a longwall armoured face conveyor a hydraulic line ruptured and sprayed the fitter with oil.
- While operating a bolting rig on a continuous miner the operator had two of his fingers trapped in the returning feed carriage when he placed his right hand on the drill to steady himself as he reached to remove a drill steel from the drill pot. One finger was fractured.
- When a Hitachi EX5500 excavator boom arch hose failed the escaping hydraulic oil smashed the cab window covering the operator in shards of broken glass and hydraulic oil.
- A new front tyre on a Bell 20 tonne articulated dump truck burst while returning from the ROM at 20 kph.
- The steel header attached to a 110 mm diameter poly compressed air line was propelled 7m across a drive when the header separated from the poly compression fitting at the victaulic coupling. The compressed air line then whipped around the drive before lodging against the back.
- While inflating a grader tyre the split rim flange was thrown 6m and the remote tyre inflation tool 65m. The locking ring had not been fitted.
- Two employees were maintaining the weigher on a conveyor which hadn't been isolated when the siren sounded and the conveyor started.
- A worker cut a deep gash across the back of his left hand while using a Stanley knife to enlarge an attachment hole on a piece of conveyor skirting. He required surgery to re-connect two severed tendons.
- A worker dislocated his elbow while cleaning a return idler when his arm was drawn into the nip point between the return idler and the conveyor belt.
- A development mine worker sustained bruising to his neck and the left side of his upper body when he was sucked into a fibreglass vent tube which he was installing.

Vehicle – Collision (11)

- A dozer operator who was completing a final side cut on a dump reversed behind a dump truck which he thought was leaving the tip head. The truck

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

was actually reversing to tip its load and contacted the dozer damaging the ROPs, handrail, two way aerial and lights.

- While conducting loading operations an MPU truck bent its auger when it reversed into another MPU which was also on the shot.
- While a light vehicle was stopped at a stop sign at the entry to a haul road it was rear ended by a light vehicle.
- A light vehicle which was driving up an incline pulled into a vehicle by-pass and drove into the booms of a parked jumbo drill rig.
- A Cat D10 dozer was cleaning the dig face as arranged with the P&H 4100 shovel operator when the operator slewed the bucket and struck the dozer.

Vehicle – Loss of Control (21)

- A Cat 793C dump truck slid about 35m on its first trip down a ramp after a shower of rain.
- A Cat 793D dump truck lost control and slid sideways on a recently watered ramp.
- A Cat 16H grader slid sideways about 50m as it descended ramp coming to rest at 90° to the direction of travel against the safety berm.
- A Cat 789 truck lost the Pos 3 wheel while travelling on haul road when the studs sheared.
- The service brakes on a Cat 12G grader failed after the pin came out of the brake linkage that connects the foot pedal to the brake unit. The operator applied the park brake to stop the grader.
- An Asia ZL50G-I loader was travelling down a hill on a sealed road when the operator lost control of it and drove through the main access gate to the site. The loader came to rest on the public access road.
- A prime mover and trailer loaded with copper ingots rolled over at an intersection while turning off a haul road.
- A semi trailer carting cement rolled over while turning at the top of a hill to go on to a haul road.

Explosion (12)

- A shuttle car slid into the rib while turning jamming its power cable between the car's outrigger and the rib causing an arc flash.
- A shuttle car driver struck the rib corner with the cable outrigger whilst negotiating a corner crushing the power cable and exposing the conductors.
- While carrying out external inspections of longwall face equipment the shift electrician found the tailgate motor's terminal box lid had a flame path gap of 0.7mm.
- While scraping an access road a grader uncovered a live booster and length of detonating cord.

Fire (28)

- A small fire occurred in the turbo area of a Cat D11 dozer.
- Oil from a broken rocker cover on a Cat D10 dozer dripped onto an unlagged turbo causing a small fire to start in the engine bay which was extinguished using the on board fire suppression system.

- When a fuel line rubbed through on Cat D10 dozer, the spray of fuel soaked the exhaust lagging and set it on fire. The on board fire suppression system and a hand held extinguisher were used to put it out.
- A fire broke out in the grid box of a Komatsu 630E dump truck.
- A fire occurred in the engine bay/pump room of an Hitachi EX3600 shovel.
- When a high pressure hydraulic return line burst on a Pantera 1100 drill rig oil sprayed onto the turbo causing a small fire.
- An MG set flash over caused a fire on a Marion 8200 dragline.
- A fire started on an underground Manitou forklift after an hydraulic hose burst and sprayed oil onto hot components. It was extinguished with a hand held fire extinguisher.
- Debris from grinding operations on a dragline bucket resulted initially in one acetylene bottle catching fire in a gas cylinder storage area. Subsequently a second acetylene bottle and two LPG gas cylinders also ignited. An exclusion zone was established and a hot zone maintained for 24 hours along with continuous cooling of the cylinders with water.
- Gas in a drill hole ignited as a driller withdraw a drill rod that had become bogged from a hole he was drilling through intrusion material overlying the coal seam.

Electrical (21)

- During relocation of a dragline cable, the tractor operator closed the clamping arm onto the cable before the cable was engaged in the pulling frame resulting in open arcing of the cable and potential energisation of the tractor.
- A mechanical tradesperson was refitting a bolt to a pedestal bearing cover on an MG Set on a dragline. During the task, he inadvertently touched the slip rings on a synchronous motor and received an electric shock.
- An electrician received an electric shock while replacing a duct lid inside a switchboard. The electrician's arm came into contact with the neutral link that appears to have been energised to 30 Volts by a back feed from a UPS.
- A boilermaker was using a grinder in wet conditions when he suffered an electric shock.
- A boilermaker received an electric shock from the plug on a gas cutting machine.
- When a longwall pump motor was started after maintenance a load bang was heard and a flash was emanated from the non drive end of the motor.

Other (14)

- An opal miner died when he was engulfed and trapped by mullock that rilled from a backfilled shaft into the underground workings.
- Workers in a workshop were exposed to blasting fumes following a shot.
- A level 4 fume event occurred after an overburden shot. The fume breached the exclusion zone.

- A level 2 fume event occurred after an overburden shot. The fume breached the exclusion zone. Six workers were treated for suspected fume exposure.
- While accessing a pump via a pontoon, the pontoon toppled and the fitter fell into the water.
- Two workers who were checking a dewatering pump at the bottom of an unventilated decline reported that they felt short of breath. The

atmosphere in the decline was tested and found to be O₂ deficient.

- A worker received burns to his face and arms from radiator coolant when the radiator cap on a Cat 992G loader flew off unexpectedly.
- A worker was splashed with acid when the pump housing cracked after a discharge valve was opened.

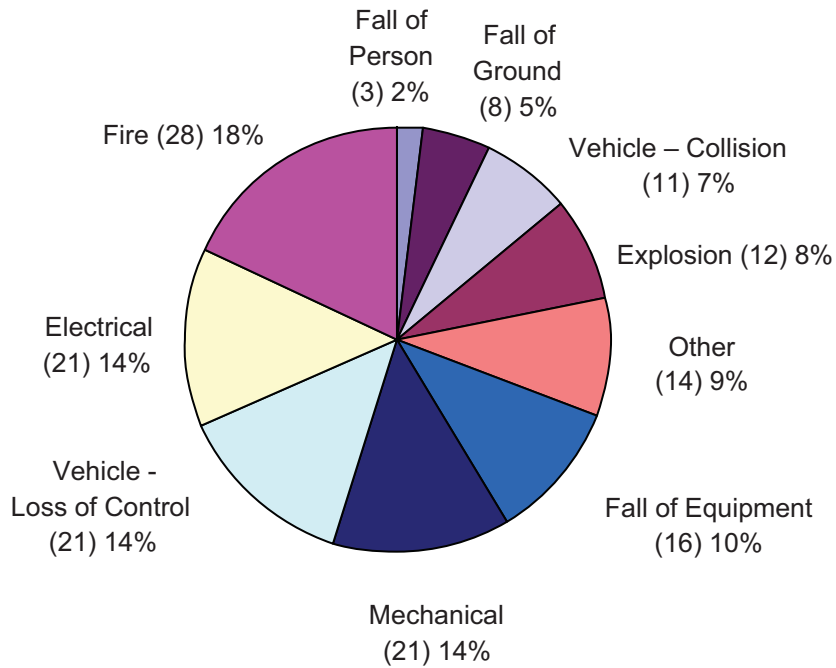


Figure 1: March 2011 Incidents (total 155) by Category

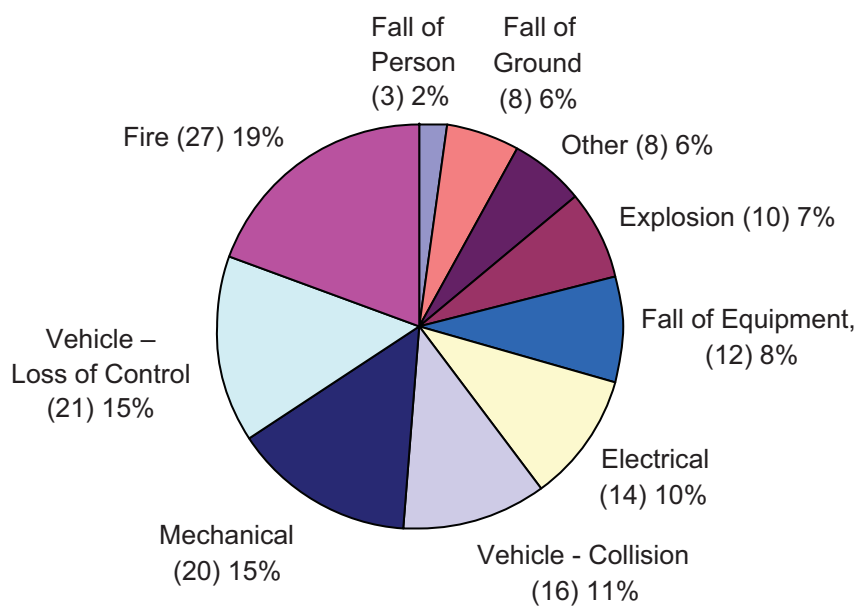


Figure 2: Twelve Month Rolling Average (138 incidents/month) by Category