

Serious accidents and high potential incidents

Mining and quarrying

Compilation of reports for May 2012

Fall of Person (5)

- A passenger sitting in the rear of a Toyota Hilux dual cab started to get out after the vehicle had initially stopped, but then fell from the vehicle as the driver reversed. He sustained a bruised shoulder.
- A worker was stopped when he was observed installing mesh floor panels in a conveyor walkway without using any fall restraint or arrest equipment. He was working around the openings which were about 25 metres above the ground.
- When an operator stepped back while hosing in a process plant the heel of his foot broke through a rusted section of walkway floor mesh.
- Following a blast in an open cut, which is located above an underground stopping area, a void was found in the shot ground.

Fall of Equipment/Material (13)

- A 12 kg length of channel section steel fell about six metres onto a process plant walkway.
- A twin 55kW ventilation fan fell from the back of an underground access when the supporting eyebolts sheared.
- A silencer fell off a 55kW underground fan.
- While lifting a Cat D11 dozer transmission into place the load swung, one end dropped and the attached extension bracket squashed the steel cap of the fitter's boot. He sustained cuts to his toes.
- A forklift was unloading a crate from one side of a truck. The tynes extended beyond the crate being lifted and under an adjacent crate. When the forks were lifted the adjacent crate fell off the truck.
- While unloading an all terrain vehicle from the back of a flatbed Hino truck one of the ramps dislodged and fell to the ground. The vehicle was left with the front wheels on the truck, one rear wheel on a ramp and the other on the ground.
- As a 250 tonne crane was unloading a generator from the back of a truck at a mine village one of the outriggers broke through the road surface and sunk into the ground causing the crane to tilt to the side.
- The position 3&4 wheels of a Cat 785 dump truck dropped into a sink hole while being loaded. The excavator operator placed the bucket into the body of the truck to prevent the truck rolling over.
- At a shaft sinking operation a fitter removed a redundant dual pilot check valve from the kibble bridle charring hydraulic circuit. The bridle, which weighs 600kg, slid 17 metres down the kibble rope onto the kibble which was sitting on the shaft collar doors.

- A fifty tonne hydraulic winch was being used to construct a modular ladderway in an underground raise when two strands of the six strand winch rope failed.

Fall of Ground (10)

- A bench collapsed under a Cat RH 340 excavator while it was loading a dump truck. The excavator tilted forward and was restrained by resting the bucket in the dump truck body.
- While mining through a faulted area the roof fell onto the continuous miner.
- About 200kg of rock fell from a development face and struck a miner who was scaling from a charge car basket. He sustained cuts to his lower back.
- While meshing and bolting a longwall face a rock slab measuring 1600mm x 200mm x 300mm and weighing about 250kg fell from the roof, slid along the ranging arm and struck the operator across the chest and legs. He was knocked to the ground and sustained bruising and a cut to his chest.
- A large slab of stone fell from the roof over the spill plates and onto a longwall chock cutting a 125V lighting cable.
- The tip head of a coal rejects dump failed beneath a Cat 777F dump truck which had stopped three metres short of the bund resulting in the truck sliding down the face of the dump.

Mechanical (25)

- A worker was struck on the side of his face by a crowbar he was using to unblock an operating jaw crusher. He fractured his lower jaw and broke some teeth.
- A Cat 992 loader operator was checking the coolant level sight glass after noticing the thermostat indicator light had come on when the radiator cap failed discharging hot coolant over him. He sustained superficial scald burns to his abdomen, parts of his neck and side of his face.
- A fitter was using a five inch grinder to remove a nut from a liner when the blade came into contact with the steel framework, kicked back and lacerated his left hand index finger above the knuckle. He required surgery to repair a severed tendon.
- A fitter was using a Hi-torque tensioning tool to tighten grouser plates on a dozer when the seal in the swivel joint of the tool failed spraying the fitter with hydraulic oil.
- A fitter lost the tip of his middle finger while levering a hose mounting block of a Terex RH170 excavator to replace an O-ring. The lever slipped

- While a worker was being raised on an IT basket to hang electrical cable his middle finger was trapped between the basket and a service poly-pipe causing a significant injury to his finger.
- While a serviceman was greasing a Cat 631 scraper using a pressure grease gun from the service truck the grease line failed causing the grease to penetrate his glove and inject into the base of his index finger.
- A worker had mistakenly fitted a 50mm compressed airline into the inlet of a 1000 litre water tank pod thinking that he was filling water. The tank ruptured when it pressurised blowing the top metal section off the pod.
- An exploration driller was trying to clear material from inside a drill rod when the rod unexpectedly disconnected from the drill head striking the offsider on the shoulder.
- A Minsup coupling separated when an airline was charged. A Safety clip had not been attached to the coupling.
- A worker was extending poly-pipe air line by connecting to an existing 4 inch valve when the valve separated from the line striking the worker on his forehead.
- Two fitters were unbolting a bull gear from the end of a hoist drum on a P&H 9020 dragline using a portable Enerpac hydraulic ram and flogging spanner. When pressure was applied the ram slipped and crushed a fitter's hand between the ram and the bearing pedestal.
- While a worker was using a hammer and chisel to work on the foot shaft on a Continuous Miner a broken splinter from the chisel embedded in his upper leg. The splinter had to be surgically removed.

Vehicle – Collision (27)

- An electrician parked his light vehicle beside a dragline shoe and then went on board the dragline to fix a fault that had stopped it. Having repaired the fault the electrician asked the operator to test swing the dragline. The light vehicle was struck by the shoe and pushed sideways.
- The right hand shoe of a dragline struck the tray of a light vehicle that was parked under the the dragline.
- The bucket of a Hitachi EX3600 excavator struck the blade of a Cat D11 dozer that had entered the excavator's swing zone.
- A Cat 785C dump truck reversed into a Cat D10T track dozer causing damage to the ladder of the dozer.
- A dump truck collided with a loader while reversing on a ROM pad. The truck operator was unaware that the loader was behind him.
- Two workers walked out from behind a sea container and into the path of a dump truck.
- While cleaning up a dig face a Cat 854K wheel dozer came into contact with the pos 1 tyre and rim on a MT 4400 dump truck.

- A light vehicle pulled out in front of a Komatsu 830E dump truck after being given permission to enter the haul circuit.

Vehicle – Loss of Control (34)

- A loaded Cat 740 articulated dump truck slid on a recently watered, off camber corner and rolled onto its side as it was descending a ramp.
- While travelling up a ramp a water tank trailer separated from the light vehicle that was towing it and rolled 25 metres down the ramp before colliding with an industrial bin.
- At the end of shift a light vehicle operator lost control of his vehicle when he over accelerated while driving across the quarry floor. The vehicle skidded on gravel for 40 metres before rolling onto its side.
- An underground worker was loading a light vehicle with bolts and mesh in a cuddy when the vehicle rolled about ten metres out of the cuddy and into the travelway.
- A Cat 785 water truck slid about 30 metres on a recently watered section of road and spun through 90 degrees before making contact with an embankment.
- The driver of a light vehicle had a micro-sleep and drove up onto a bund then back onto the road.
- When the operator of a Cat 777C dump truck applied the retarder while travelling down a recently watered ramp the truck slid for about 50 metres before stopping against a bund.
- A Volvo FM400 service truck failed to slow when the operator applied the brakes to take a corner on a ramp. The driver steered the truck down the ramp pumping the brakes. The truck travelled through a road closed sign and over a small bund at the bottom of the ramp before it ran into the toe of an in pit dump and stopped.
- While following a water truck to the pit, an empty Cat 789 dump truck lost control at the corner of the ramp and slid for about 50 metres before stopping at the bottom of the ramp.
- While travelling down a ramp, the operator of a loaded Hitachi EH 4000 dump truck lost control and narrowly missed a truck moving ahead of it. The truck came to a stop at the bottom of the ramp.
- The body of a Cat 940 articulated dump truck tipped onto its side whilst travelling along a haul road.
- A front wheel of a Mack water truck came off after a king pin boss housing on the front steer axle failed.
- A wheel came off a Cat 740 articulated dump truck as it was travelling on a haul road.

Explosion (16)

- An MMU drove over a loaded hole while loading a shot. The downline became entangled with the vehicle and was severed.
- Flyrock from a shot travelled about 1200 metres and hit an evacuated cribroom within the exclusion zone.

- Flames were seen coming from the back of an 11kV bolted coupler in an underground coal mine. Circlips were missing on the connector pins.
- A non certified power supply for a gas monitoring system was found energised in an ERZ1 area of an underground coal mine.
- During routine inspection of methane sensors, one sensor was found to be reading low. The wrong type of sensor head was connected and that the sensor would not trip power in the event of excess methane being detected.
- The flameproof encoder junction box on an Eichhoff shearer fell off the machine and was damaged which compromised the explosion protection properties of the junction box.
- The cable for a shuttle car stopped reeling in and was crushed between the breaker feeder and shuttle car. A loud bang was heard and an arc flash came from the crushed section of the cable.
- During roadworks in an underground section of a mine an Eimco made contact with a 1000 volt cable. The cable was squashed and electrical protection removed power from the damaged cable.

Fire (35)

- A small fire occurred in the engine bay of a Sandvik ED40 loader after the driveshaft came adrift and broke a hydraulic line which sprayed oil over the engine bay.
- A small fire started on a blast hole drill rig when oil dripped from the mast during maintenance onto the exhaust and ignited when the drill was started up.
- While applying degreaser to a Cat 2900 loader in a workshop the degreaser came into contact with the hot turbo and ignited.
- A fire started in the engine bay of a Cat D11 dozer after a hydraulic line blew and sprayed oil over the turbo.
- A fire started on a coal conveyor when coal fines surrounding two return rollers ignited. One of the rollers was seized while the other had a collapsed bearing.
- During maintenance on an excavator welding slag fell onto an oil covered track and started a fire.
- Hot coal embers caused by spontaneous combustion were found in an underground conveyor roadway.
- A fire in between the lower side of a P&H XPC 4100 shovel track frame and the left hand track was put out by using a hand held extinguisher.
- A fire started in the engine bay of a Sandvik DP1500 drill rig when a blown hydraulic hose at the rear of the cab sprayed oil onto the turbo. The operator activated the onboard fire suppression system and extinguished the fire.
- A boilermaker had just started gouging a bucket on an excavator, which was parked for maintenance on a coal mine ramp, when he noticed a small flame about 50mm high protruding from the ground and other small flames burning briefly around it. He extinguished the flame with a handheld extinguisher.

Electrical (12)

- During high voltage (22kV) switching live conductors in an adjacent cubicle were accessible due to failed interlocking associated with the earthing switch.
- During prestart checks of an ANFO plant, the operator received an electric shock while operating an on/off switch and touching a connecting plug.
- During fault finding of an earth continuity fault on a shuttle car, an operator who was leaning against the shuttle car outrigger received an electric shock.
- A worker received an electric shock while using a magnetic base drill in a wet environment. The worker was not able to let go until another worker disconnected the power supply by turning off the generator that was being used to power the drill.
- The 110Volt primary face cable was caught under a bolt pod on the longwall face. As a roof support was advanced, the pontoon caught the cable and severed it.

Other (12)

- A shotcrete spray rig operator working in an underground heading was taken to hospital after showing heat stress and dehydration symptoms.
- Approximately ten tonnes of water was flushed down an incorrect paste fill line into a drive in a barricaded area.
- Fume from a level 4 blast fume event breached the fume management zone. Fifteen workers who were exposed to the NOx fumes were taken to hospital for observation.
- Fume from a level 3 fume event breached the fume management zone. One worker was exposed to the NOx fumes and was taken to hospital for observation.
- Following an overburden shot fume from a level 5 fume event breached the fume management zone.
- While undergoing a mines rescue exercise under full breathing apparatus a member of the squad collapsed and was found to be unconscious.
- While removing the discharge pipe from a pontoon pump to allow the pontoon to be towed to the access ramp, the pontoon capsized when the discharge pipe was disconnected. The employees who were wearing PFDs fell into the water.

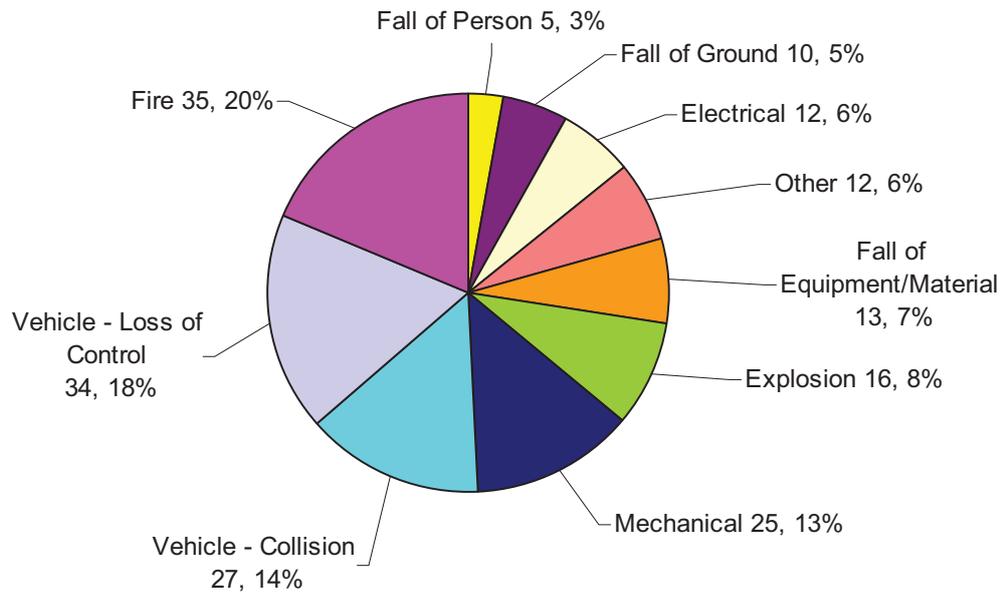


Figure 1: May 2012 Incidents (total 189) by Category

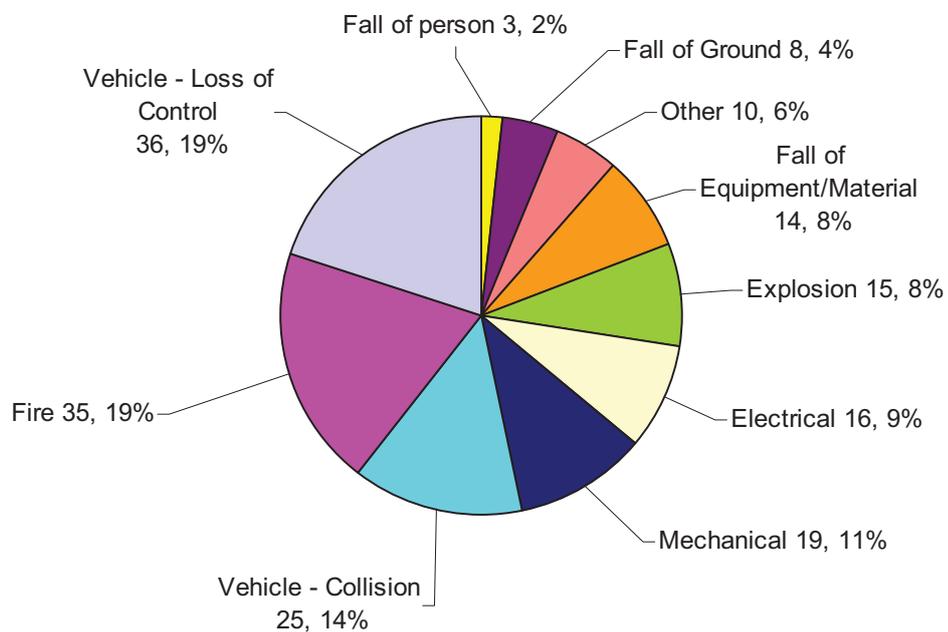


Figure 2: Twelve Month Rolling Average (181 incidents/month) by Category

(Reports from previous months are available at: <http://mines.industry.qld.gov.au/safety-and-health/accident-incident-reports.htm>)