

Serious Accidents and High Potential Incidents

Mining and quarrying



Mines Inspectorate

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Summary of reported incidents for period 1-30 April 2008

Gravity – Fall of Person

- An employee entered a fall hazard barricaded area without wearing any fall arrest equipment
- The buckled strap on a boilermaker's boot spat caught on the rung of a ladder causing him to fall 1.3 metres to the floor and cracking his ribs.

Gravity – Fall of Equipment

- A steel chute fell approximately 2 metres during installation dislodging another steel structure and striking a bystander.
- An auxiliary crane rope broke and the hook dropped to the ground after the rope became entangled.
- An excavator slid off a low loader onto its side when the cross-grade of the bench which the low loader was traversing increased.
- A loaded Cat 725 articulated dump truck was reversing uphill when the ground under the rear wheel gave way. The truck slid down the bank and rolled over.

Gravity - Rockfall

- A Cat D11R dozer was cleaning beside a catch bench, approximately three metres off a faulted wall in a coal block when a large section of the wall fell. It spilled over the catch bench and contacted the dozer.
- A section of wet and sandy highwall strata, 15 metres high and 10 metres thick, slipped onto the top bench.
- Whilst cleaning mud build-up from the track frame of an Hitachi EX5500 excavator a large lump of mud fell from the frame hitting a worker on the arm and shoulder.
- A stope crown pillar collapsed as charging preparations were being organised.
- A 1500 tonne underground rockfall buried the boom of a cablebolting rig.
- A longwall crew were repositioning a roofbolter when a section of face coal fell out and hit one of the employees. He sustained a soft tissue injury to his leg.

Mechanical

- Whilst preparing to collar a hole using a continuous miner development bolter the operator had his hand positioned above the drill steel. When he started the rotation a burr on the steel grabbed his glove entangling his right hand and arm. He sustained a fractured arm and cuts to his hand.
- Whilst removing the drill steel from the chuck, the drill rotated, catching a worker's glove and squashing his fingers and back of hand.
- An operator has had his fingers grazed while holding the steel guard rail on the drill rig when the mast lowered.
- An exploration driller was changing rods when he jammed his finger between the breakout tool and the drill deck tearing the flesh away from the first knuckle to the tip of the finger.
- While lowering an excavator oil cooler into a crate an employee stuck his finger in to determine the position of the oil cooler. As he was doing this the oil cooler dropped and cut off the tip of his finger to the first joint.
- A process plant employee sustained a fractured and lacerated finger when a hose he was lowering dropped unexpectedly and his finger was jammed by the hose flange.
- Two workers were installing roof bolts off the platform of a continuous miner. After installing a roof bolt the drill retracted down the slide and came in contact with the drill rod which had fallen against the slide. The drill steel compressed and sprung out hitting one of the workers in the side of the neck.
- An exploration driller was cleaning a drill rig radiator with compressed air when the hose became entangled in the spinning shaft of the compressor. The hose wrapped around the driller's legs trapping him against the rig. Attempts by other employees to shut down the compressor using the emergency stops were unsuccessful. Finally the friction from the shaft on the hose melted part of the hose, freeing the driller from entanglement.
- While a Volvo excavator rock breaker was breaking a rock a small piece of rock struck a water truck driver who was preparing to fill his truck which was located outside the exclusion zone.

- An underground production blasthole drilled from the level below made an unplanned breakthrough into the floor of the drive 20 metres above and within 3 metres of an operating drill rig.
- A diesel fitter was hit on the head by a lock ring as he was levering it out from a deflated tyre and wheel assembly on a Cat 785B dump truck.
- Whilst travelling to a coal prep plant the left hand steer tyre detached from stub axle and hub assembly of a coal road train.

Mechanical – Vehicle Collision

- The driver of a Cat 785 dump truck who was reversing to dump his load failed to respond to requests to stop from the dozer operator. The truck's radio had been turned down.
- A coal hauler parked at the bottom of a ramp rolled forward and the front wheels ran over the front of a light vehicle parked nearby.
- Whilst turning into an intersection the driver of a scraper noticed a light vehicle overtaking. The scraper driver changed direction to drive straight ahead to avoid a collision.
- A dump truck collided with a reversing loader. The truck driver mistakenly thought the loader driver had acknowledged his radio call. The truck was driven to the stock pile to tip the load. While tipping, the truck body slid off and fell to the ground.
- A Cat 384 rubber tyred dozer was cleaning up behind an Hitachi EX5500 excavator. The excavator bucket contacted the dozer cabin when the excavator swung around.
- During loading operations the bucket of a Cat 992 loader hit the side of the tray of a Cat 785 dump truck causing the truck driver to be thrown around in the cabin.
- Two light vehicles collided at a T-junction when one of them failed to give way.
- A Cat 2900 underground loader collided with a light vehicle parked in a stockpile bay.
- A Cat 789 dump truck, turning to position for dumping its load, ran into the rear of a Komatsu 830E rear dump truck when it stopped to lower its tray.

Mechanical – Vehicle Loss of Control

- The driver of a troop carrier transporting six people back from crib on a haul road lost

control of the vehicle crossed the haul road and came to a halt on the bund wall.

- The steering on a Komatsu 630E dump truck became unresponsive while travelling on a haul road. The operator applied the emergency braking and brought the truck safely to rest.
- Whilst negotiating a 90 degree turn, the driver of a Cat 785 dump truck lost control. The wheels hit the windrow causing the truck to spin 180 degrees.
- A Cat 773 water truck slid on a previously watered section of road contacted the windrow and spun around through 270 degrees.
- A Juggernaut underground loader operator pulled up at a tag board. When he left the loader to remove his tag it rolled away coming to rest against the side wall.
- While entering a corner in wet conditions the driver of an empty Cat 773B dump truck was distracted by the two way radio microphone falling from its holding clip. As a result his braking through the corner was late causing the truck to skid and slide into the windrow.
- A Getman scissor lift platform was travelling downhill when the wheel bearing failed and the front wheel and axle detached.
- A semi trailer driver was loading his truck with concentrate when the truck rolled away coming to rest against the stockpile 10m metres away.
- A wheel disconnected from a light vehicle while it was travelling down a ramp.
- The park brake button on a parked PJB underground vehicle released as the door closed. The operator notified a tradesman to check the brake. The park brake activation valve was replaced and the vehicle returned to service.
- A Cat 930 dump truck veered off the road into a safety bund after the driver fell asleep at the wheel.
- A Terex 3700 dump truck operator travelling down a recently watered ramp noticed another dump truck come around the corner but slightly out into the middle of the road. When he applied the retarder the truck locked up and spun around clipping the oncoming truck.
- A Komatsu dump truck returning to the pit lost brakes at the top of the ramp leading into the

pit. Application of the retarder, foot brake and emergency brakes failed to slow the truck. The operator then applied the park brake which slowed the truck. It eventually stopped 20 metres from a working face after travelling a further one kilometre.

- A dump truck lost power, including to the retarder, as it was travelling down a ramp. The driver applied the emergency brakes and pulled it up in the windrow.

Explosion

- Overcharging of the battery in the fire detection panel in a train loadout control room resulted in production of gases above the lower explosive limit.
- The integrity of a continuous miner flameproof enclosure was compromised when an O ring was jammed under the door of the enclosure.
- The conductors on a shuttle car cable were exposed when the cable was pulled in half after the shuttle car drove too wide around a corner and the cable jammed against the side wall.
- Workers who were within 100 metres of an underground crusher ROM hopper where secondary blasting was taking place were not warned of the firing.
- A sulphide dust explosion occurred following a development firing.
- Flyrock from a blast penetrated the roof of a light vehicle parked in the pit during the firing.
- Thirty -three non-electric detonators exploded in a fire which was being used at a quarry to destroy supposedly empty explosives boxes and packaging after a blast.

Thermal – Fire

- A rag left on the turbo charger of a water truck caused a small fire.
- After a drill rig ran out of fuel the operator was bleeding the system before refuelling by removing the bleed valve from where fuel sprayed onto the turbo and ignited.
- A fire started on a Cat 785 water truck as result of a fractured fuel line spraying fuel onto exhaust manifold
- An hydraulic boom hose on a Liebherr 994 excavator leaked and sprayed oil onto the turbo guard resulting in a small fire.

- A fire started on a cat 854 rubber tyred dozer when welding slag dropped onto and ignited grease on the rear differential.
- A steer tyre on a Cat 797 dump truck caught fire. The driver left the truck and was taken outside exclusion zone. The fire was extinguished and the truck isolated for 24 hours.
- After refuelling, a driver left the nozzle behind the passenger steps of his prime mover. When he drove off the bowsers were dragged from their footings and crushed beneath the trailers of the truck.
- Spilt ANFO lying on the floor of a drive after blasthole charging on the previous shift reacted with acidic ground resulting in an exothermic reaction and the generation of thick black smoke.
- Gas ignited at the surface of a coal exploration borehole when a driller cut into the liner being raised from the hole.

Electrical

- A power cable was squashed against the rib by a roof bolting machine whilst tramming out of the face.
- A worker received an electric shock when he touched a solenoid “J” box that was lying on the ground with wires hanging out of it.
- A worker received an electric shock whilst working on a pump starter switchboard.
- When a loader which was being carried on the back of a truck passed under railway power lines at the entrance to a mine an arc occurred between the loader and power lines.
- An employee received an electric shock whilst removing the plug from a 240V GPO on a Lincoln 575 diesel welding set.
- An operator received an electric shock from the float switch of a sump pump.

Other

- During train loading operations a Cat D11 dozer was side cutting between two stockpiles when the stockpile slumped towards the dozer partially covering the cabin deck and damaging the hand rails.
- An employee was bitten by a snake while inspecting equipment stored in a sea container.