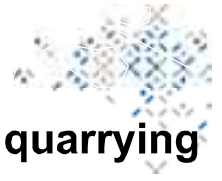


Serious Accidents and High Potential Incidents

Mining and quarrying



Mines Inspectorate

Released: 31 March 2008

Summary of reported incidents for period 1 January-15 March 2008

Gravity – Fall of Person

- While water blasting a conveyor steel structure the corroded floor mesh on which the contractor stood gave way and fell approximately five metres to the ground. The operator was able to grab hold of the steel frame and avoid falling through the hole.
- An operator fell to the ground when a hand rail on a Cat D10R dozer failed at the rubber vibration mount.

Gravity – Fall of Equipment

- While installing an underground conveyor belt structure the supporting chain block let go allowing the structure to drop 200mm and strike a worker on the head.
- While working on an upper floor of a process plant a hammer was dropped. It bounced on the floor, over the kick board and fell onto a walkway on a level below.
- Workers were setting up to use a monorail carriage and chain block as an anchor point for working at heights. As the carriage was moved along the monorail it dropped off the end and fell ten metres to the floor.
- A Cat 797 dump truck was reversing short of a tip edge when the ground started to move. The operator got out of the truck. The truck subsided eleven metres horizontally and ten metres vertically.
- A waste dump tip head collapsed as a Cat 789 dump truck backed into tip. The truck slid approximately 15 metres vertically down the face of the dump.

Gravity – Rockfall

- A rock rolled from a bench face under the housing of a P&H 4100XC shovel and damaged the electrical supply cable.
- A section of pit end wall fell onto the tracks of an Hitachi EX 3600 excavator pushing it sideways
- Approximately 1200 tonnes fell from a section of pit wall which was being monitored and was banded. The bund did not contain the fall which

spread over two thirds of the haul road which was open to traffic.

- Two shotfirers were leaving a bench in a light vehicle after inspecting a shot when rocks fell from the bench face beside them. Some of the rocks struck the vehicle causing minor damage.
- A section of a haul road wall failed. It struck the driver's side of a Komatsu 465 dump truck, which was being loaded with blasted material, pushing in the door, breaking the windscreen and damaging the walkway and handrail.
- The driver of a Cat 783 dump truck was struck and partially concussed when a rock fell from the bucket of a loader tipping in the back of the truck. The rock struck the handrail of the truck and ricocheted through the driver's closed window.
- While handling the power cable to a continuous miner a piece of rib, measuring approximately 150mm X 500mm X 500mm, fell narrowly missing the operator. However another piece hit him knocking his helmet off and dazing him. He suffered soft tissue damage to his neck.
- An underground production drill rig operator noticed some small rocks starting to fall from the roof. He vacated and barricaded the area. When he returned with his supervisor a rock fall had occurred burying the rig
- Whilst completing an advance of 12 metres with a continuous miner a section of roof approximately ten metres long by four metres wide and one metre high collapsed. Part of the fall struck the operator. He was knocked and pinned down by the roof stone. He sustained minor bruising and grazing.

Mechanical

- A new transmission was being manoeuvred into position in a Cat 623F scraper when a lifting eye bolt failed and the transmission fell onto a worker's leg. He sustained a fractured femur.
- A worker was taken to hospital with a suspected fractured foot after an underground loader lowered a workbasket onto the foot.
- While installing a spray bar on an isolated conveyor a worker had his right thumb partially

amputated when the end of the spray bar dropped unexpectedly onto the head chute.

- Whilst assembling equipment using a hydraulically driven high tension gun a fitter received facial lacerations and a suspected injured jaw after being struck by the hydraulic torque multiplier.
- While striking a pin removal tool with a sledge hammer, to remove a pin from a Komatsu D375 dozer blade K link, a piece of the tool has broken off and struck the hand of the worker who was holding it.
- Whilst commissioning a lubrication system a steel hydraulic line burst and oil under pressure hit the worker on his abdomen causing bruising.
- An apprentice boilermaker was grinding inside a steel tank when the grinding wheel snagged on the adjustment cord of a cloth face shield, and came up and made contact above his left eye.
- A maintenance fitter was using a nine inch grinder when it gripped and kicked back striking him in the chin and cutting to the bone.
- A piece of a bearing flew off whilst being struck by a drift during removal from a light vehicle and entered the fitter's forearm.
- A Cat 785C dump truck was reversing to dump a load when one of its steer tyres failed in two places.
- A Cat 793 dump truck was reversing under a shovel bucket when a section of the tread and both adjacent sidewalls of a steer tyre failed.
- A blow out occurred on the inside rear tyre of a Cat 773B dump truck shortly after the tyre was re-inflated in the workshop. The air blast pushed the operator backwards.
- A fitter was working on the hydraulic tank of a shuttle car with the knowledge of the driver. The driver walked away then came back. He forgot the fitter was still working on the shuttle car and sat in the driver's seat ready to move the car.
- A conveyor was re-energised whilst still being worked on. The isolation lock and tags were placed on the incorrect lock out mechanism.
- During a hoisting shaft head rope cut the head rope was being lowered using a sheave wheel attached to a chain block. The sling from the chain block broke and the head rope and cappel fell onto the cage.
- Whilst pulling a Bretby Cable Handler with an Eimco loader the wire rope sling failed at the tow point striking a bystander who sustained a small laceration on his chin and bruising on his forearm and underarm.
- A Cat D11dozer was using a sling to pull another Cat D11 dozer out of a bog when the towing point on the bogged dozer failed and was projected into the fuel tank of the towing dozer.
- While pressure testing the butt welds on chilled water pipes for a surface refrigeration plant a pipe collar failed causing the pipe end and flange, weighing approximately 25kg to launch vertically and land approximately 11 metres away.
- When the drill rig and stab jack on a Joy Mini Bolter were lowered the stab jack continued to extend and the machine slewed towards the rib.
- A conveyor failed to stop when the pull wire emergency stop was pulled.
- A metal stake penetrated the driver's side floor when a light vehicle drove over the top of it.

Mechanical – Vehicle Collision

- A light vehicle drove through a barricaded area into a live dump where a dozer was building a ramp.
- While overtaking a Cat 16H grader a Cat 693 dump truck driver saw another vehicle coming from the opposite direction. The overtaking truck went too close to the grader, drove over the blade and contacted one of the tyres of the grader.
- A personnel carrier with six people aboard collided with a reversing Eimco loader.
- A light vehicle was following behind a Cat 777 dump truck when it turned left at an intersection. As the light vehicle continued through the intersection it had to swerve to avoid a Cat 785 dump truck which was entering the intersection from the left.
- A Cat 785 dump truck narrowly avoided colliding with a light vehicle when it cut the corner of an intersection and did not see the light vehicle that had stopped to give way on the truck driver's blind side
- Two D11R dozers working at right angles to each other collided as they reversed.
- A dozer was pulling a length of poly pipe up a steep incline with the blade raised which restricted the forward vision of the driver. As the dozer reached the top of the incline and started to tip over to level the blade contacted a troop carrier parked on the crest.

- The operator of a Komatsu 830E dump truck was approaching an intersection and did not see the hazard lights of a Komatsu 830E dump truck which was broken down near the intersection. He swerved to avoid the broken down truck but ended up making contact.
- Two Cat D11R dozers working at right angles to each other collided as they reversed.

Mechanical – Vehicle Loss of Control

- A forklift carrying a 1200kg load around a plant rolled onto its side when the front wheel rode up onto a windrow. The driver's seat belt mounting broke off in the incident.
- The operator of a Cat 773B dump truck lost control of his truck coming down a haul road. He drove up a ramp, close to its edge, and rolled the truck. The truck came to rest on its side in a drain.
- A Cat 769C dump truck, while carting a load, lost brakes on a ramp and travelled downhill approximately 300 metres before coming to a stop when it crashed into a stockpile.
- A loaded Cat articulated dump truck was reversing up a stockpile ramp when the engine stalled. The truck rolled down the ramp onto the bench and along the side of an adjacent stockpile causing the tray to tip onto its side.
- When an empty Cat 785 dump truck came down a recently watered ramp and turned at a switchback the operator lost control of truck, and it has slid into loaded Cat 785 dump truck coming up the ramp.
- A Cat 773 water truck was descending a ramp that just been watered when it sliding side ways. When the operator braked with the retarder and foot brake the truck flipped onto its side.
- While driving down a wet ramp, a Cat 785 dump truck lost traction and hit the berm on the side of the ramp and spun around.
- The operator of a Franner crane lost control of the crane while travelling on a wet road. It veered across the road mounted a berm and rolled over into a drain.
- A Cat 793 dump truck veered into a berm as a result of a micro sleep.
- A tie rod on a fully loaded Cat 789 dump truck broke while hauling.
- The operator got out of an Eimco LHD without applying the park brake. He relied on the operator's door interlock to engage the park brake

which on this occasion failed to operate, allowing the machine to move forward.

- An empty bus rolled across a carpark and came to rest against a berm.
- The operator got out of an Eimco LHD without applying the park brake. He relied on the operator's door interlock to engage the park brake which on this occasion failed to operate, allowing the machine to move forward.

Explosion

- Electrical sparks were observed discharging from a Continuous Miner after the power cable was damaged at the breaker feeder approximately 100 metres away.
- Open arcing and exposed conductors were observed when a power cable went through a breaker feeder.
- Whilst conducting charging operations, an MMU changed lanes on the bench and ran over a 300 gram booster lying on top of drill cuttings beside a blasthole.
- Flyrock landed in close proximity to workers in mobile equipment.
- A blast guard was unaware that a fitter was within the exclusion zone until the fitter was observed leaving the area.
- A 12V battery which had just been taken off charge exploded when the operator was connecting the leads to the terminals.

Thermal – Fire

- A fire was extinguished on the rear differential of a Canter truck after the operator smelled smoke and stopped the vehicle on the decline.
- After parking an explosives charge car in the vehicle's lock up area, the operator noticed smoke coming from engine bay area of the vehicle. The exhaust lagging had caught on fire.
- A small fire occurred on an AD45 truck when a hydraulic hose burst and sprayed oil onto the turbo.
- A small fire occurred on an Hitachi EX1800 excavator after oil entered the exhaust system from a blown turbo charger.
- A fire occurred on an overburden rig when a hydraulic hose burst spraying oil onto the turbo charger.

- A fire started on a Cat D10 dozer when a lift ram cylinder sprayed oil onto the engine turbo area and also onto the driver's cabin.
- An oil leak onto the turbo charger resulted in a small fire on a Terex RH340 excavator.
- A boiler maker was welding in the revolving frame of a dragline when a spark fell into a cable tray and started a small fire.
- A worker was lighting a cutting torch when a leak of gas from the flash back arrestor and supply hose union ignited and burnt his hand.

Electrical

- An apprentice electrician received a 240V electric shock whilst changing a fuse when he placed his socket on the fuse terminal. The isolator was found to be faulty and had not operated correctly.
- An electrician received an electric shock when he touched a live wire whilst wiring on the dead side of a junction box.
- An electrician received an electric shock when he mistakenly started disconnecting the motor on a sump pump which was close to the one he had just isolated and tested for dead.
- A dragline operator received a slight electric shock while operating an air winch behind the dragline during a lightning strike on or near the machine during a storm.
- Exposed conductors were observed when a bobcat cut two 240 volt cables whilst cleaning up in reclaim tunnel.
- A bobcat was cleaning spillage in a crushing plant when it contacted a 415v cable.

Other

- A coal mine was evacuated due to the high level of hydrogen (>75ppm) and carbon monoxide (>200ppm) in a sealed goaf.
- An underground worker, who had been grouting cables, suffered heat stress.
- A drill jumbo offsider collapsed from heat stress after working in hot conditions.
- Workers were flushing the hoses used to inject rapid setting foam into a cavity on the longwall face when the worker located at the pump removed the staple from the catalyst hose without depressurising the system. The hose disconnected from the coupling hitting the worker

in the nose and spraying the pressurised liquid into his eyes. He sustained a broken nose and chemical burns to his eyes.