Queensland Mineral Mines and Quarries

Serious accidents and high potential incidents

Compilation of reports for November 2017

Gravity

Fall of ground (3)
- 1200 t of rock has fallen onto a bench that was drilled and ready to be loaded for blasting.
- Due to poor ventilation on a work area, a worker investigated and found that a 1 t fall of ground had damaged the ventilation system in the area.
- A magnitude 1.7 seismic event occurred near a major fault above a previously mined area. The event was felt underground and on the surface.

Fall of people (2)
- A process plant employee sustained soft tissue injury to their knee when the floor grate they were walking on gave way causing the worker to strike their knee on a floor beam.
- As a worker was descending to a stationary crusher, he stumbled and fell onto his hip. Three point contact was not being used.

Fall of equipment/material (3)
- While using a come-along to lift a pump, the lifting eye attached to the pump body broke off, striking a worker a glancing blow to the side of the head.
- A stacker conveyor fell onto its side due to a wheel riding up onto the bund. At the time, the conveyor was being towed by an excavator.

Explosives

Misfire ()
- While digging at a face an excavator operator identified a column of unexploded explosives product and a lead coming from the column.

Thermal

Fire (3)
- The passengers of a light vehicle observed flames coming from the engine bay of a Moxy concrete agitator they were passing. They advised the operator of the Moxy, who stopped the truck and used a hand-held extinguisher to extinguish the fire.
- A 18v Hitachi Battery located on a bench in the Gold Room exploded during charging causing a fire. The fire lasted approximately six minutes and extinguished itself.
- A fire occurred on the revolving light of a light vehicle due to the light being damaged by mesh that was being carried in the vehicle.

Molten metal/material (1)
- During roll-out of an anode furnace, the furnace travelled past its rest position. The pouring spout of the furnace was not plugged, which resulted in molten metal pouring out onto the access bridge and spill pit launder below.

Vehicle

Collision with a person (2)
- An operator was exiting a light vehicle on a decline when it slipped out of gear and started to roll forward. The operator re-entered the vehicle to regain control and in the process, injured his thumb by the steering wheel movement.
- An excavator was being used to clean a fine ore bin. While the operator and spotter were replacing a hydraulic hose on an attachment, the attachment moved and struck the operator on the leg. The operator received bruising and was taken to hospital as a precaution.
Collision with another vehicle (6)
- While operating in a stockpile area, a Cat 980G and Cat 972 loader collided bucket to bucket.
- The driver of a light vehicle stopped to talk to the operator of a Cat 2900 loader. After the discussion ended, and assuming the light vehicle had gone, the loader operator reversed into the light vehicle causing minor damage.
- While conducting the pre-start check on a PC450 excavator the operator slewed the excavator and the counterweight contacted and damaged the light vehicle that the operator had parked beside the excavator.
- An AD50 truck had turned off a decline and was preparing to reverse into a nearby drive. Another AD50 truck that was following the first turned off the decline and drove into the rear of the first truck. The driver of the second truck was not aware the first driver was going to reverse.
- The driver of a light vehicle entered the work area of a loader without notifying the loader driver. The loader reversed and collided with the light vehicle causing minor damage.
- A Komatsu WA480 loader was using the haul road to move material to the crushing plant. As the loader crested the ridge, the load partially obscured the field of view. When the loader came onto level ground, the operator sighted that a blast surveyor had parked a vehicle on the haul road while conducting a survey. The loader driver had to brake to avoid a collision.

Collision with a built or natural structure (1)
- A light vehicle rolled 1 m into a bund after it had been parked without being in gear and with the hand brake only partially applied.

Rollover (2)
- A Cat 623 scraper was stripping topsoil from a dam and dumping to a waste stockpile. While dumping on the stockpile the scraper lost traction and slid 3 m sideways down the stockpile.
- A Cat 120 grader was being loaded onto a low loader. As the operator was aligning the articulation, the grader became unbalanced and rolled onto its side. The operator was wearing a seat belt and was not injured.

Collision with an animal (1)
- A light vehicle struck a cow at 50 km/h, setting off the airbags in the vehicle. There were no injuries to persons or livestock.

Electrical
Electric shock (4)
- While cleaning out a sump, a worker used their hand to push a pump out of the way and received an electric shock.
- While electrical workers were installing cables in an MCC they noticed a busbar cover was missing, leaving live 440 volt components exposed. An investigation identified that the cover had been missing for some time.
- During construction work in site offices, an electrician isolated the wrong power circuit, resulting in live exposed parts in the work area.
- While working in a chute, a person received an electrical shock on his arm when he contacted a proximity switch.
Mechanical

Entanglement in rotating part (1)
- Following maintenance work on a vibrating feeder, it was found that the conveyor under the feeder had not been isolated.

Caught in nip point (1)
- The operator of a Getman scissor lift platform caught his foot between the side of the platform and a stabiliser jack as the platform was being raised.

Laceration with sharp object (1)
- A fitter was walking with a battery powered angle grinder tucked under his arm with the cutting wheel being supported by his right hand. The grinder slipped and in the process of preventing it from falling the trigger mechanism activated. His hand at the base of his right thumb was cut and he was transported to hospital for treatment.

Crushed between a load and structure (2)
- A maintenance worker was using a rattle gun to tighten plates on a jaw crusher. The jaws moved under their own weight trapping and damaging the rattle gun. The crusher had been isolated and the jaws were thought to have been fully at rest.
- During the installation of an expansion joint in a duct, a worker suffered a fractured arm. The worker had placed his arm inside the expansion joint to remove a lifting chain when the joint moved unexpectedly trapping his upper arm.

Other (1)
- The rear axle on a loaded Cat 777D failed and dislodged from the truck while travelling down the haul road.

Chart 1 - November 2017 (33 Incidents)
Chart 2 - 12 Month rolling average to end November 2017 by Hazard Category (320 Events)

- Vehicle: 24%
- Thermal: 17%
- Pressure: 2%
- Psychosocial: 1%
- Physical Health: 3%
- Explosives: 5%
- Electrical: 11%
- Biological: 1%
- Chemical: 3%
- Mechanical: 7%
- Gravity: 26%

Chart 3 - January to November 2017 Breakdown of Gravity hazard category (83 Incidents)

- Fall of equipment/material: 37%
- Fall of ground: 30%
- Fall of people: 17%
- Fall of a structure: 5%
- Inundation/engulfment (eg rock - fill - mud rush - water): 6%
- Other: 1%
- Fall of vehicle: 4%
Exposure to other chemicals
Silica
Entry into an irrespirable atmosphere
Dust
Cyanide
Electric shock
Fall of a structure
Fall of equipment/material
Fall of ground
Fall of people
Caught in nip point
Entangled in rotating plant
Lifting
Struck by projectile
Tyre rim failure/rupture
Fire
Collision with a built or natural structure
Collision with a person
Collision with another vehicle
Collision with an animal (e.g. kangaroo - cattle)
Other

Chart 4 - January to November 2017 Breakdown of Vehicle hazard category (76 incidents)

Chart 5 - November 2017 Compliance matters issued by Hazard category (39 Issued)
Past Mineral Mines and Quarry summary reports can be sourced at