Queensland Mineral Mines and Quarries

Serious accidents and high potential incidents

Compilation of reports for September 2017

Gravity

Fall of ground (2)
- A 20 t wedge failure occurred at a mine, with rocks landing up to 16 m from the toe of the highwall.
- 15 t of rock fell from the shoulder of a drive. A production drill rig was operating on the drive at the time.

Fall of people (3)
- A worker slipped on a poly pipe when they were stepping over a bund. It is suspected that the worker fractured their ankle.
- A plant operator leant against an unsecured removable handrail and overbalanced. Another worker saw the incident take place and was able to grab hold of the operator, which prevented them from falling.
- The operator of a Cat 350 excavator slipped and fell while stepping down from the cabin, striking his forearm on a sharp rock. The operator suffered a laceration to their arm.

Fall of equipment/material (1)
- A plastic spillage barrier, weighing approximately 4 kg, detached from a conveyor and fell 5 m to the floor below.

Fall of a structure (1)
- A section of 100 mm steel pipework fell 3.7 m onto a platform below. The section, which measured 1.2 m in length, had failed due to corrosion.

Inundation/engulfment (eg rock, fill, mud rush, water) (1)
- A dredge operator starting their shift observed the stern of the dredge was very low in the water. An investigation found the engine compartment was taking in water.

Mechanical

Caught in nip point (1)
- Workers were observed changing idlers on a conveyor that had not been isolated. The investigation identified that the workers had isolated the wrong conveyor.

Thermal

Fire (6)
- A grader observed smoke and smelled a burning smell coming from under the dash of a grader. This was due to an electrical fault on the grader.
- The operator of a Volvo L180F loader observed smoke coming from the machine's engine bay. The on-board fire suppression system activated automatically and extinguished the fire. An investigation found the fire was caused by heat lagging saturated by oil or diesel.
- A fire occurred in a green waste stockpile.
- A fire occurred in the engine bay of a Cat 2900 underground loader. The operator extinguished the fire with a hand held extinguisher. Personnel were evacuated to refuge chambers and underground fresh air bases as a precaution.
- A fire occurred in the engine bay of a surface drill rig. The fire when the rig’s driveline failed, damage a hydraulic pipe that then sprayed hydraulic oil onto the hot engine.
- A fire occurred at an exploration site during refuelling of a petrol pump due to fuel being spilt onto the hot exhaust.

Explosion (1)
- A major substation transformer exploded and caught fire.
**Vehicle**

**Collision with another vehicle (5)**
- The brakes on a Normet failed as it was reversing down an incline. The vehicle rolled backwards and made contact with a light vehicle before the operator was able to steer into wall to bring the vehicle to a stop.
- The operator of a Hitachi 670 excavator was conducting a pre-start check when he slewed the machine and came into contact with a light vehicle parked nearby.
- An unattended Hino service truck, parked in a car park, rolled forward and collided with another parked vehicle before coming to rest against a fence.
- A Cat 988H face loader reversed into a Cat 740 water truck that had entered the operating area of the loader.
- A Cat 980G loader operating in a load out area reversed into the rear of body tipper truck that was parked nearby.

**Loss of control (1)**
- A light vehicle was found rolled at the bottom of an embankment at a tailings storage facility. The investigation found that two contractors had be joyriding in the area.

**Rollover (1)**
- A backhoe tipped onto its side when descending down an embankment.

**Explosives**

**Misfire (4)**
- During a face inspection, leads and explosive products were noticed 3 m above the floor.
- While drilling holes for ground support, a jumbo operator identified remnant explosives in a drill hole.
- During firing, a shot only half initiated. An investigation found the ignition point at the centre of the shot did not initiate.
- A backhoe driver, who was digging out a stump, noticed a misfire inside a split set located in the wall of the sump.

**Electrical**

**Electric shock (3)**
- A laboratory a worker received an electric shock while examining a water distillation unit.
- A worker received an electric shock while replacing a wet, contaminated flow switch on a pump.
- A boilermaker received an electric shock when he touched a proximity switch while working on a knife gate.
Chart 1 - September 2017 (30 Incidents)

Chart 2 - 12 Month rolling average to end September 2017 by Hazard Category (312 Incidents)
Chart 6 September 2017 Compliance matters issued by Non-Hazard category (25 Issued)

- Fall of people 12%
- Fall of ground 29%
- Fall of vehicle 10%
- Falling into a liquid (e.g. drowning) 1%
- Inundation/engulfment (e.g. rock - fill - mud rush - water) 5%
- Fall of a structure 6%
- Fall of equipment/material 37%

Chart 3 - October 2016 to September 2017 Breakdown of Gravity hazard category (95 incidents)

- Loss of control 1%
- Rollover 18%
- Collision with a built or natural structure 24%
- Other 8%
- Collision with a person 4%

Chart 4 - October 2016 to September 2017 Breakdown of Vehicle hazard category (76 Incidents)

- Collision with another vehicle 45%
Chart 5 - September 2017 Compliance matters issued by Hazard category (77 Issued)

Chart 6 - September 2017 Compliance matters issued by Non-Hazard category (25 Issued)

Past Mineral Mines and Quarry summary reports can be sourced at