

Queensland Mineral Mines and Quarries

Serious accidents and high potential incidents

Compilation of reports for August 2017

Gravity

Fall of ground (2)

- A seismic event caused a 5 t rock fall, bringing down mine services.
- A loader operator was dumping waste material in a drive when he noticed slumped ground ahead of him. Chain barricades restricting access to the drive had been removed.

Fall of equipment/material (4)

- A tarpaulin roof was being installed when a gust of wind lifted it and carried it away, along with the roof's accompanying tension rods. The structure, which weighed almost half a tonne, landed on the verge of an adjacent road.
- The roll over post on a Jumbo boom failed during rock bolting operations. This caused the boom's cradle to drop to the ground.
- A worker discarded a section of edge protection over a handrail, from height. The worker was not using a spotter to check for people or equipment below, and the section landed in an area that had not been barricaded to restrict or prevent access.
- An excavator bucket detached from its boom while feeding material into a jaw crusher. The bucket fell into the crusher jaws before being violently ejected.

Fall of a structure (1)

- During the commissioning of a loading ramp, a worker removed the safety pins from the ramp, allowing it to drop and strike a worker on the shoulder and hardhat. The worker was knocked to the ground and suffered multiple fractures to his leg.

Thermal

Fire (8)

- A bearing on a Terrex Finlay C15 50 mobile cone crusher heated up and caught fire.
- A Cat 2900 loader, operating in remote control caught fire. The on-board fire suppression was unable to contain the fire. The mine was evacuated and the fire allowed to burn out.
- A hydraulic oil hose on a Sandvik DP 1500 drill burst and sprayed oil onto the hot exhaust.
- A Cat D9H dozer blade lift cylinder hose burst, causing oil to spray onto the exhaust manifold.
- The main steering hose on a Cat AD55 failed near the hydraulic tank, spraying oil onto the hot exhaust manifold.
- A piston shot through the block wall of a diesel alternator, hitting the starter motor. The impact caused an arc that resulted in a fire.
- The bearing housing, fitted to a trunnion moved approximately 50 mm and rubbed on the plant guarding. The heat from the friction caused the grease to catch alight.
- A Jacon Combo Sprayer caught fire when its discharge line came into contact with the hot exhaust. The investigation found the discharge line had not been packed away correctly.

Explosion (1)

- During smelting operations a feedstock expulsion occurred that resulted in molten metal being ejected from the feed port and lance port of the furnace.

Explosives

Unintended detonation (1)

- A development face blast was initiated while testing the firing line with a logger. An electric detonator was connected into an electronic circuit

Misfire (2)

- While installing ground support, the drill that was being used, intersected an old blast hole that contained remnant emulsion, causing a misfire.
- An operator reported that he had uncovered a potential misfire. When an inspection was conducted, a booster was located.

Electrical

Electric shock (1)

- A worker, who was wearing wet gloves, received an electric shock while resetting a RCD circuit breaker.

Arc flash (2)

- While overwind limits were being checked, an arc flash occurred in the winder's excitation transformer.
- A worker was excavating a trench when they dug-up a live 415 volt cable, causing a trip at the electricity supply authority's fuses. While a permit had been obtained, the incident was a result of a miscommunication between the supervisor and worker.

Other (1)

- During rainfall, water entered the pendant control on a chain hoist and caused an uncontrolled downward movement of the hoist. The hoist cut out on a lower limit.

Vehicle

Collision with a person (1)

- A worker was using a mini excavator to remove spillage from underneath a Jaw Crusher. The excavator slewed and the bucket contacted the knee of a worker who was using a shovel to clean up spillage.

Collision with another vehicle (2)

- A Cat R1700 loader turned into an underground stockpile area, colliding with a light vehicle that was parked in the access.
- During harvesting of salt, a track truck reversed into the rear of a harvester causing minor damage. The truck driver was unaware that the harvester was in the process of repositioning.
- A heavy vehicle clipped the front of a light vehicle that had stopped to give way to the heavy vehicle at an intersection.

Collision with a built or natural structure (2)

- A Champion IT was transporting a diamond drill rig to another underground mine. While tramming on the decline, the brakes of the IT failed, causing it to roll uncontrolled for approximately 40 m down the decline.
- A Volvo L250G loader rolled into a conveyor 'A' frame due to the brakes not applying when the engine allegedly stopped.

Rollover (2)

- While a Pos-track loader was being unloaded from the rear of a truck, one of the ramps shifted causing the loader to roll onto its side. The ramp was not pinned to anchor it to the truck.
- A Cat 623E Scraper drove with its left front wheel off the edge of a stockpile and onto the slope of the stockpile.
- While tipping of a load of crusher dust at a stockpile, the rear wheels of a Cat articulated dump truck rode up onto the stockpile, causing the bowl section of the truck to roll over.
- A Moxy truck operator was executing a tight turn in preparation for reversing into position to dump a load. While manoeuvring the bowl section of the truck overturned.

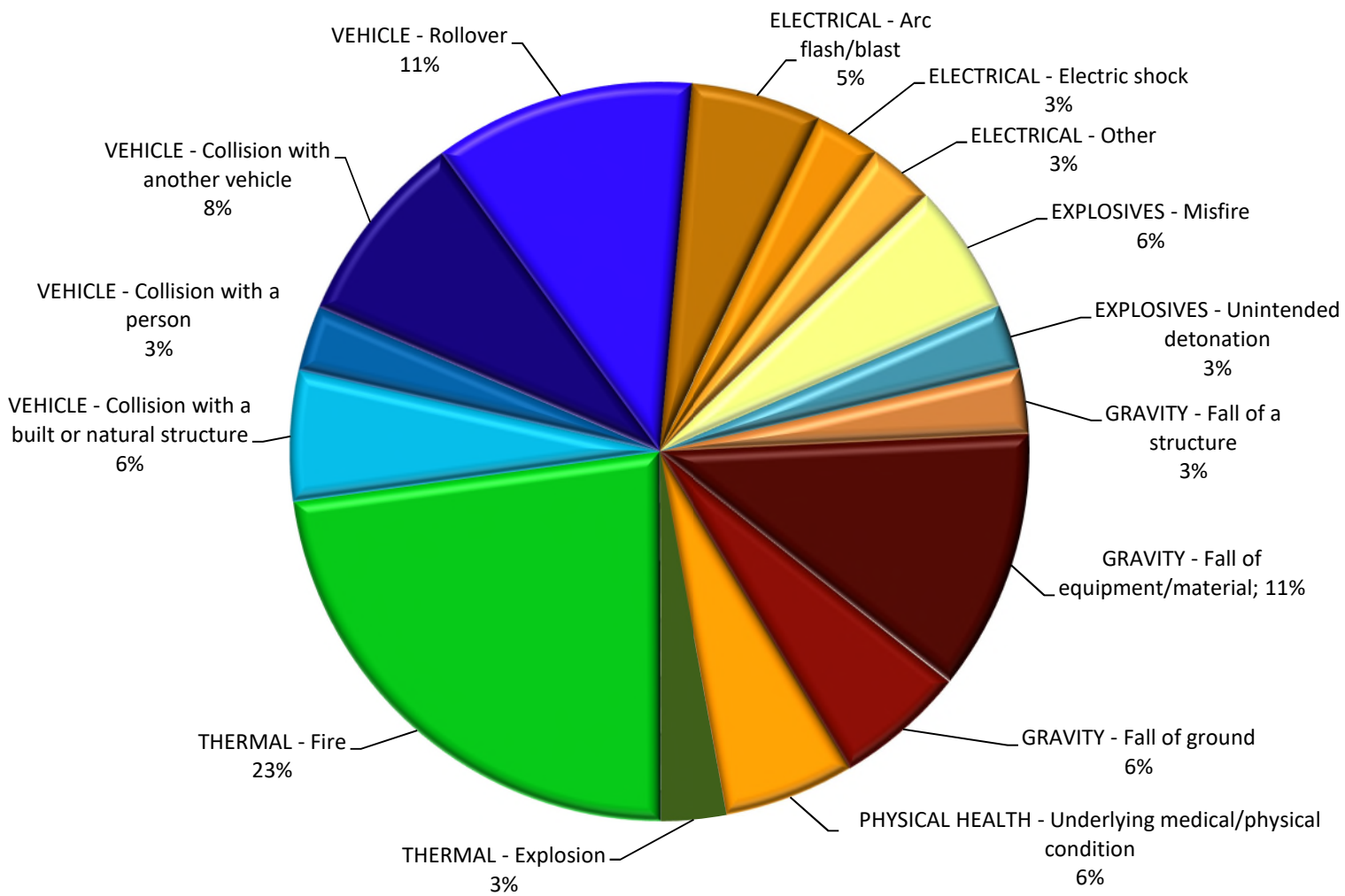


Chart 1 - August 2017 (35 Incidents)

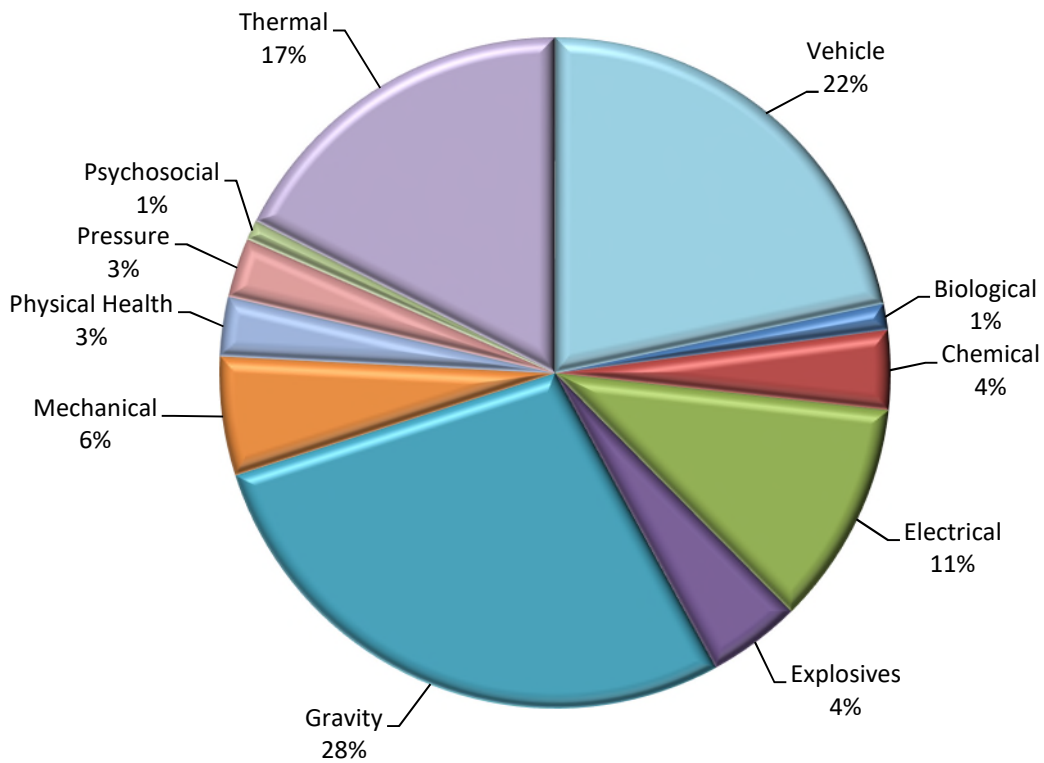


Chart 2 - 12 Month rolling average to end August 2017 by Hazard Category (314 Incidents)

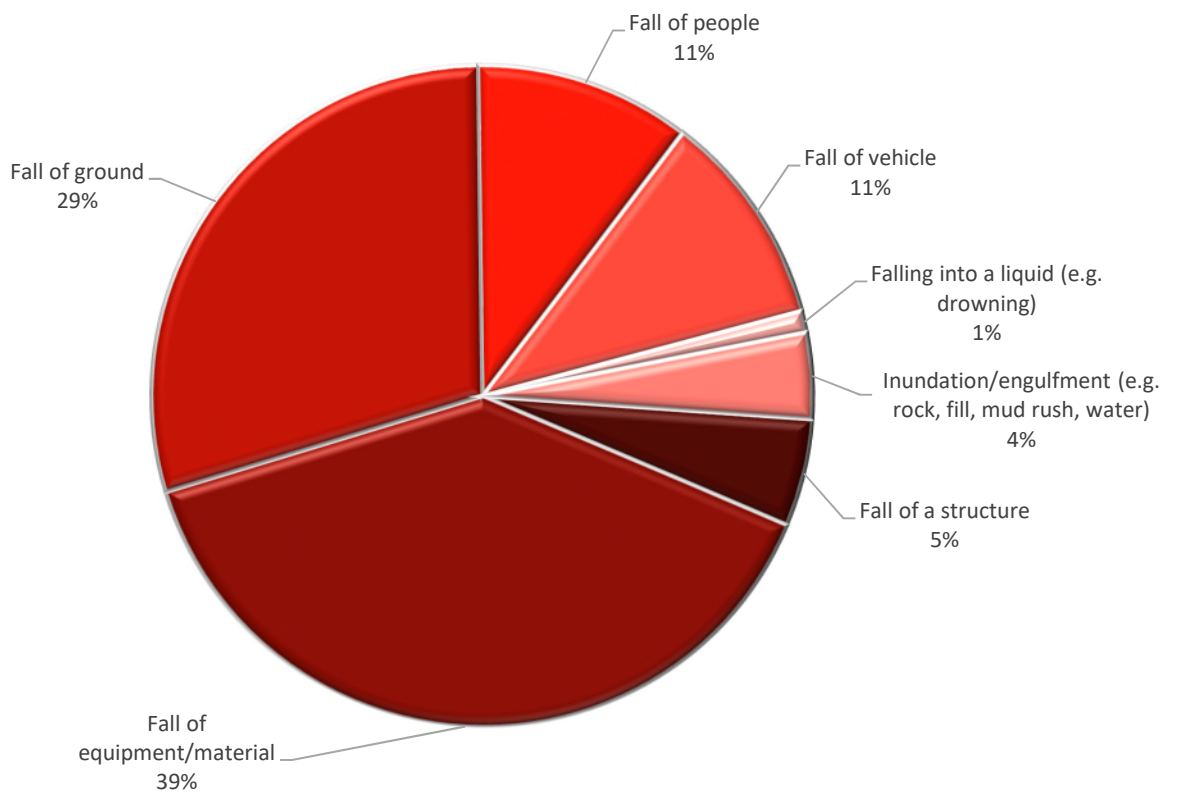


Chart 3 - October 2016 to August 2017 Breakdown of Gravity hazard category (95 incidents)

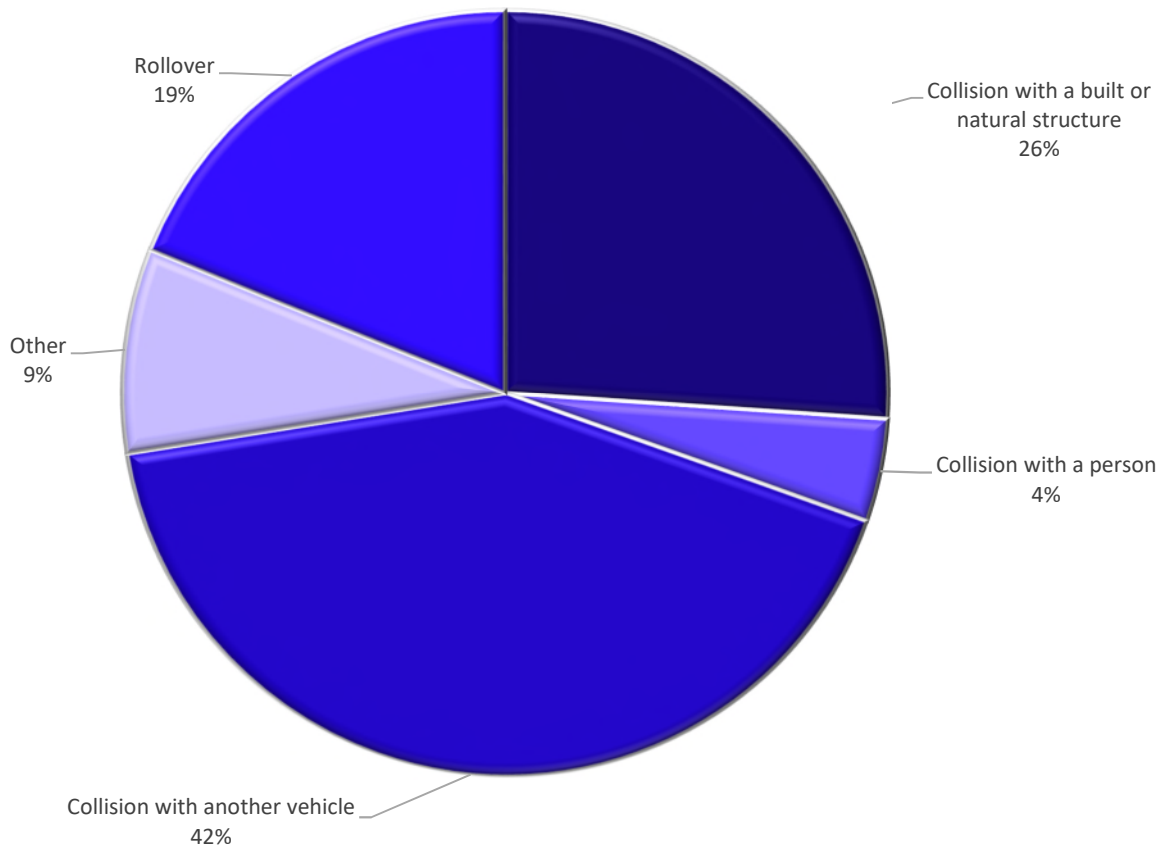


Chart 4 - October 2016 to August 2017 Breakdown of Vehicle hazard category (69 Incidents)

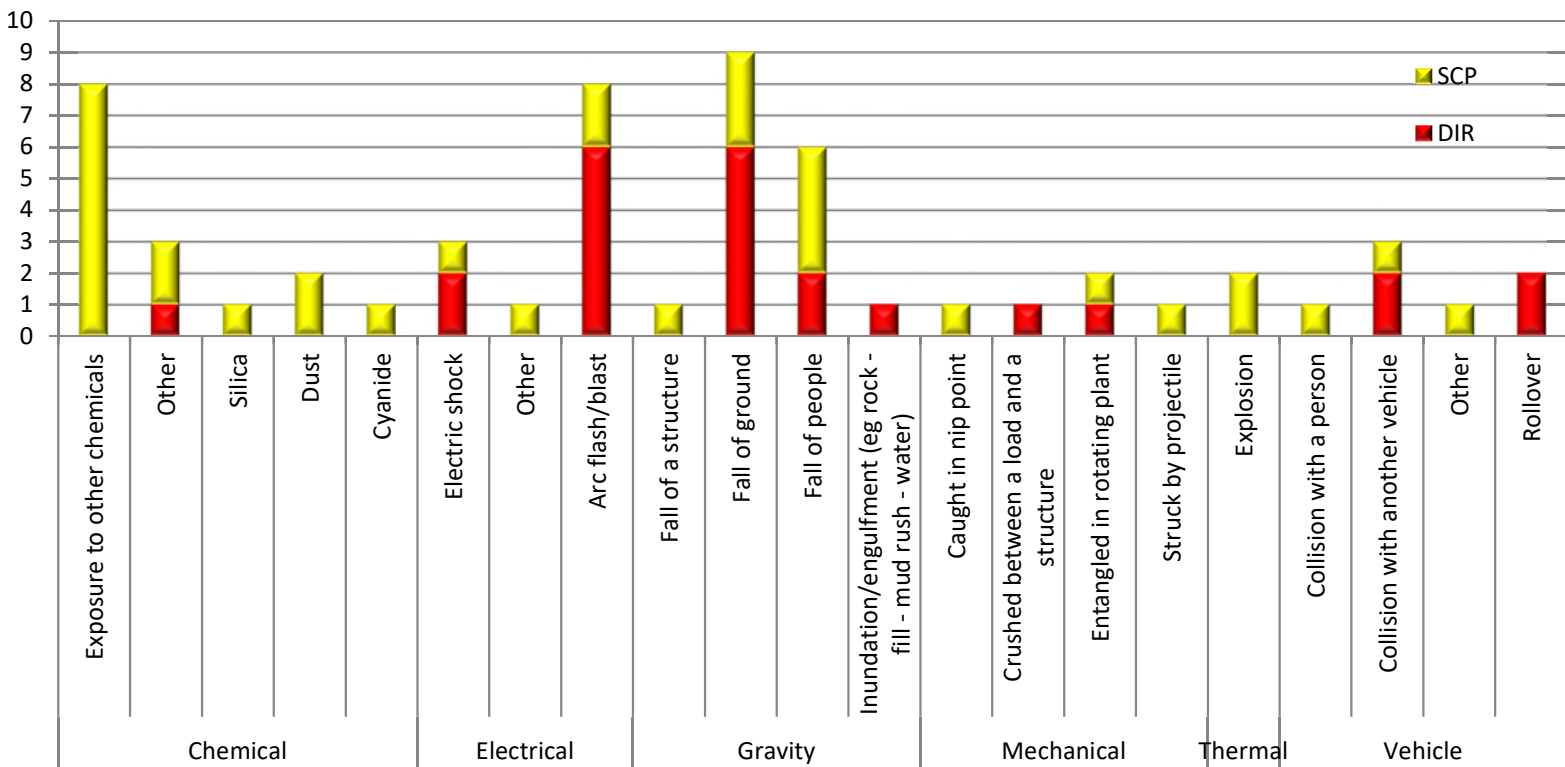


Chart 5 - August 2017 Compliance matters issued by Hazard category (58 Issued)

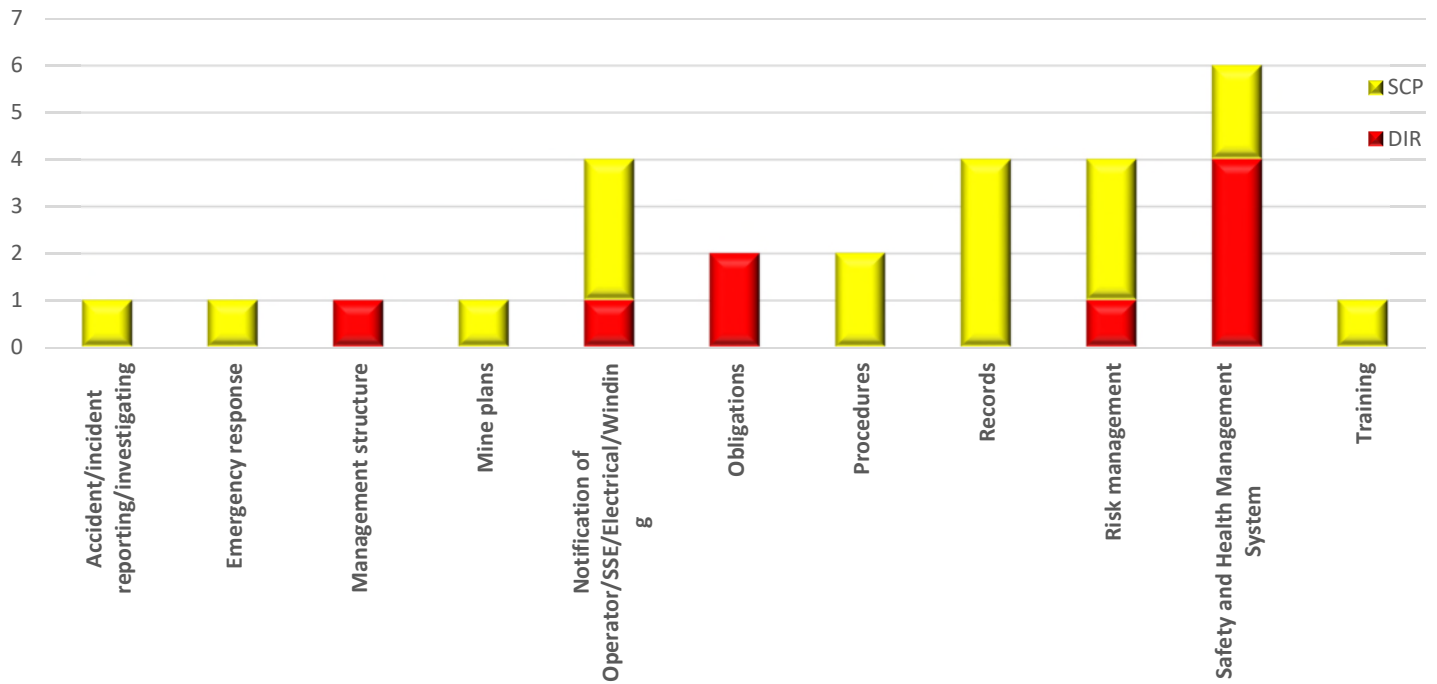


Chart 6 - August 2017 Compliance matters issued by Non-Hazard category (27 Issued)

Past Mineral Mines and Quarry summary reports can be sourced at
<https://www.business.qld.gov.au/industry/mining/safety-health/mining-safety-health/accidents-incidents/serious-and-high-potential>