

REPEAT SIGNIFICANT INCIDENTS – No. 5 UNPLANNED MOVEMENT AND BRAKE FAILURES ON MOBILE EQUIPMENT

Below are brief details of 4 incidents, all involving the failure of braking systems. Please review these incidents for similar potential at your site.



REAR DUMP TRUCK COLLIDED WITH A TRACTOR

A fully laden haul truck was climbing up a gently inclined ramp (+6°) when the engine cut out. The driver activated the park and load brakes, an excavator operator also placed two chocks behind the wheels. The brakes and the two stop blocks did not hold the truck and it slipped backwards where it collided with and ran over a tractor, which was making its way up the ramp. Basic causes included:

- Inadequate design – no fail-safe braking system.
- Ineffective park brake.
- Inadequate chocking devices

<http://significantincidents.bhpbilliton.net/fndItem.asp?id=732&Type=Incident>



HAUL TRUCK ACCIDENT

The operator of a Haul Pac truck drove the vehicle into a rubble pile to avoid a possible collision with a loader or another truck. when both the quencher and service brake systems failed. Basic causes included:

- Failure of the quencher and service brake.
- Inadequate maintenance.

<http://significantincidents.bhpbilliton.net/fndItem.asp?id=625&Type=Incident>



TRUCK COLLISION

An operator left a truck unattended in a parking lot whilst he went to pick up a key. The truck was parked with the engine running and the emergency brake was not engaged. The truck rolled down a gentle slope colliding with a Toyota truck, which due to the impact also hit another truck. Basic causes included:

- Failure to turn off the engine.
- Failure to engage the emergency brake.
- Violating standard parking procedures.

<http://significantincidents.bhpbilliton.net/fndItem.asp?id=1178&Type=Incident>



RUN AWAY UTILITY VEHICLE

A utility vehicle transporting Expanfo ran out of control when both the fail-safe brakes and emergency brake failed. The vehicle ran down a decline into a dam where it stopped. Basic causes included:

- Vehicle fail-safe brakes did not stop the vehicle.
- Vehicle emergency brake did not stop the vehicle.
- Steering did not work due to hydraulic failure.
- Brake release plates were left on the vehicle for convenience.

<http://significantincidents.bhpbilliton.net/fndItem.asp?id=119&Type=Incident>

LEARNING'S FOR MANAGEMENT INCLUDE:

- Inadequate and ineffective maintenance of brake systems.
- Parking standards shall include requirements for the immobilisation of surface mobile equipment (eg. chocking or trenching) and consideration for breakdown maintenance activities.

LEARNING'S FOR OPERATORS INCLUDE:

- Ensure chocks and other restraining devices are adequate, in place and used when required as per site standards.
- Never operate mobile equipment unless all brakes have been tested and work to specifications.
- Safety belts will help save your life. Fatalities can occur from low impact collisions.