Government of **Western Australia**
Department of **Mines, Industry Regulation and Safety**

Monthly Safety and Health Snapshot

for the Western Australian minerals sector

Outbreak of fire

Issued August 2018

Outbreak of fire is the highest reported category for notifiable incidents on mine sites. Reoccurring incidents within the data include vehicle mechanical fires, electrical fires and fires caused by fluid ignition. In case of fire, do not panic, carry out correct emergency procedures, consider the situation, and move carefully to the safest area away from the fire.

This snapshot covers the period from 1 April 2017 to 31 March 2018 when there were 1,178 injuries and 2,500 notifiable incidents (specific reporting categories). Of these, 9 injuries and 717 notifiable incidents were identified as fire caused by mining operations.

For more information about occupational safety and health, visit our website **www.dmirs.wa.gov.au**

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Department of Mines, Industry Regulation and Safety

Notifiable incidents by reporting category

98% outbreak of fire above or below ground

Other 2% consist of:

- Electric shock or burn or dangerous occurrence involving electricity.
- Loss of control, failure of braking or steering of heavy earth moving equipment.
- Potentially serious occurrence.
- Serious or appears to be serious injury (including fatality).

Injuries by occupation

3 boilermaker

3 haul truck driver

The remaining **3** injuries were to a **fitter**, a **driller** and a **supervisor**

Injuries by severity

7 of the 9 injuries

identified as outbreak of fire injuries were **classified as serious**

6 of the 9 injuries were **lost time injuries**

Injuries by employment type

4 Company

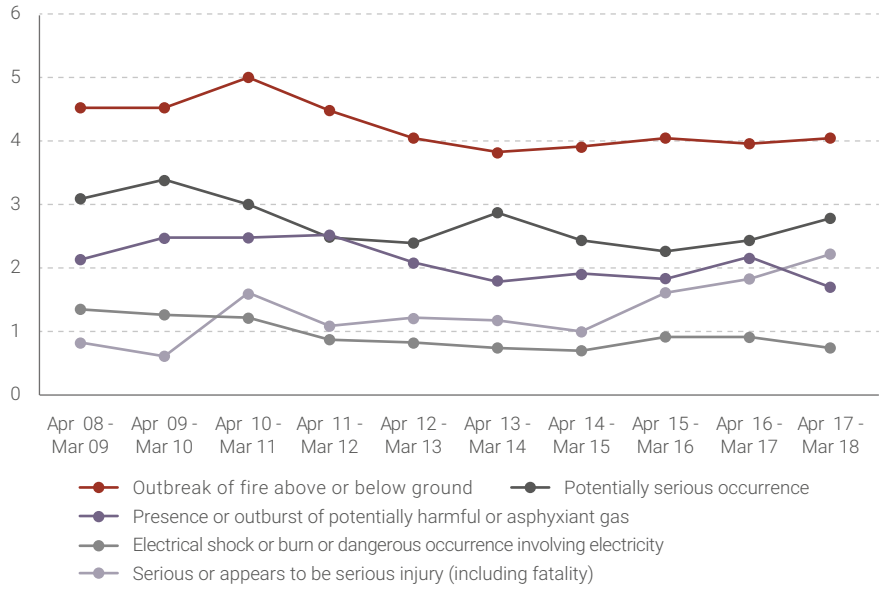
5 Contractor

Notifiable incidents by area

658 of the 717 notifiable incidents occurred during **surface operations**

59 of the 717 notifiable incidents occurred during **underground operations**

All notifiable incidents by reporting category frequency rate (top 5)



Note: The information in this snapshot has come from a keyword search of incident reports.

Some recent incidents

Underground fire 31/05/18

Work crews were performing maintenance activities in an underground mine, when a supervisor alerted them that smoke could be smelt at one of the levels. The skip crew, who was using oxy cutting equipment to remove deflector angles on the centre divider, stopped work and moved down to inspect the shaft. Smouldering wood brattice was found in the main shaft, and the fire was extinguished with water bottles and one portable dry chemical powder (DCP) extinguisher. The area was continuously monitored for another two hours with no re-ignition event. Investigations found slag from cutting skip deflector angles had blown from the skip and settled on a timber ledge under the skip, causing the timber to smoulder. A downcast vent provided constant air flow that contributed to the wood smouldering.

Vehicle fire 03/06/18

A surface drill rig was being used at an open pit when the drill operator noticed a flame coming from the engine. He shut down the machine, got out the cab and put out the fire with a portable dry chemical (DCP) extinguisher. A hydraulic hose had failed, allowing oil to come into contact with the exhaust and turbocharger, causing the fire.

Electrical fire 13/01/18

A worker noticed a fire coming from workshop crib rooms at a processing plant and raised the alarm with emergency services. An emergency services officer investigated and found a fire in the crib room toilet. He put out the fire using a dry chemical powder (DCP) extinguisher. It was found that wiring damage in a light fitting in the crib room toilet caused an electrical fire.

Vehicle fire 06/06/18

A fitter at a processing plant noticed smoke coming from behind the driver's cab of a grader tramming to the workshop. He informed the grader operator to stop, then opened the left hand engine bay bonnet. He saw a flame ignite between the bonnet and the cab. The E-stop and aqueous film-forming foam (AFFF) fire suppression system were manually activated but did not put out the fire. Two dry chemical powder (DCP) extinguishers were used to put out the fire.

Spotlight on *Mines Safety Significant Incident Report No. 216*

Fire in processing plant laboratory

18 May 2015

Contributory causes

- Maintenance of the fume cupboard, as recommended by original equipment manufacturer (OEM), was not undertaken.
- Inspections by the certified service provider did not identify the fire hazard of the damaged gel coating on the rear wall panel.
- Risk assessments did not identify fire risks associated with acid digest processes.
- There was no fire rated collar installed between the exhaust vent and laboratory wall.
- The laboratory building was of a sandwich foam panel construction, with no fire retardant properties, and no fixed fire-suppression system in place.

Further information

- Standards Australia, AS/NZS 2243 *Safety in laboratories*

Safe work practices

Examples include:

Only refuel at designated surface or underground refuelling locations that have appropriate fire suppression systems

Remove excess grease and oil from engines

Carry out daily inspections of critical components such as hydraulic lines, heat shields and other protection equipment

More information

- *Underground mobile equipment fires – pamphlet*
- *Working in hot processes – pamphlet*