



## Health and Safety Bulletin No. 9

### Traffic management on roads and other areas where vehicles and mobile plant operate on a mine

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#### Background

WorkSafe Mines Safety has conducted a review of mine inspection reports, including traffic management audits and incident factors, from 2019–2022. These identified a number of common issues that may have contributed to serious and potentially serious incidents involving contact between heavy vehicles and light vehicles.

#### Summary of hazard

Collisions and contact between heavy vehicles and light vehicles occurred across many areas of the mine sites, including on mine roads, haul roads, ROM pads, waste dumps, active mining areas and ancillary services areas. These incidents have resulted in the serious injury and death of workers in the Western Australian mining industry.

#### Contributory factors

- Inadequate and or poorly designed and risk assessed traffic management controls, including interface areas between operations and ancillary services.
- Inadequate road design that does not minimise the interaction between heavy vehicles and light vehicles.
- Poor construction and maintenance of roads and traffic controls.
- Lack of monitoring of operator compliance with traffic rules and procedures, including communication between heavy vehicles and light vehicles and maintaining a safe working distance.
- Poor compliance with and or inadequate operating procedures and authorisations with regard to entering and parking in active mining areas, including autonomous vehicle operating areas.
- Inadequate inspection and monitoring of the workplace to identify traffic related hazards such as blind spots, visibility issues caused by dust or lack of light as well as maintenance of traffic management controls.
- Inadequate inspection and maintenance of heavy plant and equipment.
- Inadequate controls related to heavy plant or light vehicles and pedestrian interfaces.

## Actions required

The Work Health and Safety (Mines) Regulations 2022 (the regulations) require a mine operator to establish and implement a mine safety management system.

This includes the preparation of a principal mining hazard management plan (PMHMP) for each principal mining hazard identified (PMH) at the mine, with one PMH specified in the regulations being roads and other areas where mobile plant operate.

The development of the control measures to manage the risks associated with roads and other areas where mobile plant operates (including active mining areas) must include:

- the impact of road design and characteristics
- the design of areas where mobile plant operate
- maintenance of mobile plant
- traffic management
- operating procedures, including parking in production areas
- training and competence of persons using roads and areas where mobile plant operate and undertaking maintenance on mobile plant
- providing and maintaining hazard and traffic control signs
- the interaction between mobile plant at an underground mine or quarry.

The PMHMP must be clearly communicated and integrated with the management systems of any other person conducting a business or undertaking (PCBU), including contractors, at the mine.

## Recommendations

To ensure compliance with the regulations, mine operators should:

- expedite the development, implementation and communication of the PMHMP dealing with roads and other areas where mobile plant operate
- consider the use of technology that may assist in preventing collisions and loss of control
- review the effectiveness of existing controls to ensure safe interaction between heavy and light vehicles.

It is noted that at the time of publication, the transitional provisions still apply; however, it is envisaged that PCBUs will be well progressed in preparation of PMHMPs.

## References and further information

### Department of Mines, Industry Regulation and Safety

- Code of practice: [Mine safety management system](#)
- Guide: [Traffic management fundamentals audit](#)