

## MINE TRAFFIC MANAGEMENT

One of the most significant and foreseeable risks on mine sites is collisions involving mobile equipment. In one recent incident, a heavy-duty, specialized transport truck maneuvered through a worksite adjacent to a parked light-duty pickup truck, fatally striking a mine worker outside of their parked vehicle.

Interactions among vehicles, heavy equipment, people, and mine infrastructure continue to account for a substantial share of high-potential incidents across British Columbia's mining industry. Traffic management is a critical element of a mine site's safety plan. Effective traffic management requires a combination of controls to ensure people can work safely in and around all types of vehicular traffic.



### Key Takeaways

- Ensure workers are highly visible, wearing CSA-approved personal protective equipment.
- Develop safe operating procedures, training programs, and ensure there is adequate supervision.
- Implement mine traffic control measures that are appropriate for the worksite and equipment.
- Enhance vehicle visibility by using a combination of whips, beacons, reflective tape/stickers or other means.
- Implement a communication protocol; use clear language and signage.
- Ensure all personnel recognize the risks surrounding danger zones/blind spots, exclusion zones, and approach zones of large equipment or moving machinery.
- Review and audit the effectiveness of the site traffic management systems regularly or as conditions change.
- Ensure pre-shift crew meetings and informal check interviews emphasize the severity and consequences of accidents/incidents.
- Reinforce workers' right to refuse if they are feeling pressured or uncomfortable about the work and the working environment.
- Ensure weather conditions are considered and managed appropriately to maintain safe operating conditions for light and heavy vehicles.



## Health, Safety and Reclamation Code for Mines in BC Key Sections:

### Traffic Control – 6.8.3

The manager shall prepare traffic control procedures, showing the maximum allowable speeds for the vehicles in use, rules for passing, “stop” and “yield rules,” priority rules for various vehicles, rules for night operation, maximum operating grades, emergency run-off protection, shoulder barriers, and any other information that may be required to ensure the safe operation of all types of vehicles on the mine site.

### Training – 1.11.1 – The manager shall ensure that:

- 1) Workers are adequately trained to do their job or are working under the guidance of someone who has competency both in the job and in giving instruction, and
- 2) Ensure that all employees receive thorough orientation and basic instruction in safe work practices.

### Additional (non-exhaustive) requirements to consider:

- Mobile Equipment – Underground Mines – 4.6.1 to 4.7.3
- Mobile Equipment – 4.9.1 to 4.9.21
- Mine Haul Road Design – 6.9.1 and 6.9.2
- Remote Control Operations and Emerging Technology – 6.18.1 to 6.18.4
- Equipment Operation – 6.19.1 to 6.19.6

### Additional Resources

- MSHA - [Powered Haulage Safety](#)
- Workplace Safety North - [Pedestrian-Mobile Equipment Visibility Guideline](#)
- WorkSafe Western Australia - [Traffic Management Audits for Mining Operations](#)
- Resources Safety & Health Queensland, Australia - [Collision Prevention Guidance Note](#)
- BC Government - [Fatigue Management](#)
- WorkSafeBC - [High-visibility Apparel](#)
- WorkSafeBC - [Fatigue Impairment](#)
- Imperial Oil Heavy Haul Safety Video - [Imperial - Heavy Haul Safety Video](#)