

Safety Bulletin

Date: August 2023

Fitness for work - fatigue

This safety alert provides safety advice for the NSW mining industry.

Issue

The NSW Resources Regulator recently received 2 incident notifications in which fatigue was an influencing factor. In both incidents, roster patterns involved long periods without days off (fatigue breaks). In the first incident, the worker had a fatigue event on their 20th consecutive 12-hour shift. The second incident identified an electrician who was on his 10th consecutive 12.5-hour night shift. Incidents are continuing to be reported when workers operating vehicles are affected by fatigue.

In addition, targeted assessments on fatigue have identified that control measures such as fatigue risk assessments were not being undertaken for workers who had a combined work and travel time in exceedance of the mine's fatigue management plan.



Figure 1 Worker escapes injury after microsleep while driving

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Circumstances

Shift work and the nature of the mining industry require workers to have irregular and long hours in a high-risk working environment with many operations exceeding 12-hour shift lengths. When a person is fatigued, they are in a state of impairment that can impact physical and or mental capacity including reduced alertness and performance. It is typically associated with inadequate sleep, extended time awake or the time of day.

Mine operators should be aware of their legislative obligations regarding fatigue. This includes:

- mine operators having effective control measures for minimising the risk that workers will be impaired by fatigue. (Schedule 2 (1)(b) Work Health and Safety (Mines and Petroleum Sites) Regulation 2022)
- mine operators implementing control measures to either eliminate or reasonably practicable minimise the risk with regards to systems of work, including how the work is managed, organised, and supported. (Division 11, Cl 55D (2)(d) Work Health and Safety Regulation 2017.

Mine operators should be aware when selecting appropriate controls more than one control measure may be required and higher order controls should be targeted for implementation, as per the control hierarchy. The interaction of different controls should also be considered and assessed to ensure they complement each other.

Recommendations

Identifying controls to manage the complexity and variability of fatigue is a challenge and the regulator is aware that depending on the operation, different systems of work are required. It is recommended that mine operators:

- have assessed if fatigue is a risk for the mine
- ensure controls identified in their fatigue management plan are implemented monitored and regularly reviewed
- control measures for fatigue are consistently applied across all areas of the mine site including contractors and project works
- provide training, information and instruction to workers participating in risk assessments that address fatigue so they can effectively participate
- must provide fatigue management training and instruction about fatigue and the necessary controls to manage fatigue to all workers, including supervisors and contractors
- where reasonably practicable, fatigue monitoring systems are installed on mobile plant
- have systems in place to monitor compliance with the fatigue management plan for all workers on site i.e. staff, workers and contractors
- complete fatigue risk assessments for all workers on site that are working more than 14 hours (including travel time)
- where journey management plans are identified as a control measure, they are implemented for workers at risk e.g. workers who have a combined total of 14 hours of work and travel time.
- ensure there is a process in place to trigger the review of journey management plans. Reviews should occur to ensure the workers nominated travel point during the work roster period is up to date. This should also include travel requirements before and end of the roster.
- that if an incident occurs on site and fatigue is identified as a factor, the investigation should include a review of the fatigue risk assessment and controls in place.

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Note: Please ensure all relevant people in your organisation receive a copy of this safety alert and are informed of its content and recommendations. This safety alert should be processed in a systematic manner through the mine’s information and communication process. It should also be placed on the mine’s common area, such as your notice board where appropriate.

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