

COMPLIANCE PRIORITIES OUTCOMES

Surface vehicle interactions

Surface coal vehicle interaction incidents

Issue: Vehicle interactions continue to be a source of concern for the NSW Resources Regulator, due to the number of reported incidents related to vehicles.

Positive communications failures are only one aspect that can give rise to collisions. Other causes include road design, surface conditions and entry into exclusion zones.

Between January 2017 and February 2018, there were 20 incidents reported to the NSW Resources Regulator in which it was identified that overwatering, or water on roads, led to the loss of control of a vehicle. This represents almost one-third of the total number of loss-of-control incidents reported during this period. The number of incidents led to the publication of two safety bulletins in 2018:

- [SB18-06 Lack of positive communications](#)
- [SB18-09 Overwatering of roads leads to vehicle incidents](#)

What we did

Eight sites were selected and assessed in relation to vehicle interactions. The assessments were conducted between 26 October and 15 November 2018. Each site was notified at least two weeks in advance with the date and scope of the inspection.

The things we wanted to know:

- Did the sites receive and act on the safety bulletins?
- How do sites verify that positive communications are being used?
- How do sites verify that road watering standards are followed?

- What are the sites traffic management standards and do operators know them?
- Have operators been trained and assessed in relation to maintaining control in wet conditions?
- What are the road designs and construction standards like and how do mines verify them?
- Is the watercart fleet up to scratch and is your defect management system effective?

What we found

The findings were specific only to some (or one) of the sites assessed.

- No formal process to receive and review safety correspondence from the NSW Resources Regulator.
- No process to verify if controls for watercart operations and two-way radio communications were effective.
- Inspectors witnessed non-compliances with site vehicle and driving standards.
- Supervisors failed to intervene when there was a positive communications failure.
- There were inconsistent training standards due to a high demand on training resources.
- Watercart operator training, and assessment programs did not cover all the tasks to which an operator may be assigned.
- Watercart spray outputs varied across fleets potentially contributing to over/under watering
- Some operators did not understand the site traffic separation standard.
- Several sites (about 25%) were using collision avoidance technologies on elements of their fleet. One site had installed the system on all their HMEs and required contractors to install a 'mobile version' of the technology.
- 'Wings' (bundling) were put on dumps to maintain separation between equipment.

Positives

- There were good examples of sites taking opportunities to segregate heavy and light vehicles.
- There were good examples of sites restricting the volume of mine traffic and decongesting areas.
- Several sites had versions of restricted permit systems. One site implemented a comprehensive restricted permit system for vehicles other than Heavy mobile equipment (HME) or for direct supervision purposes, on all active haul circuits.

Outcome

Operators at the selected sites have an improved understanding of the activities that can be undertaken and the controls that can be implemented to minimise vehicle interactions including improved training, verification of controls, vehicle segregation, traffic restrictions, and acting on NSW Resources Regulator recommendation in safety alerts and bulletins.

Inspectors issued nine notices in total

- Five notices of concern
- Three improvement notices
- One prohibition notice

Next steps

The NSW Resources Regulator will continue to monitor the incident trends in this area to determine whether a broader and deeper assessment of industry practice is required.

Recommendations

To address the continued occurrence of incidents involving vehicle interactions, industry should:

- review training/competency systems to ensure that standards are maintained when there is a high demand on training resources
- ensure that operators are trained, and competency assessed for all the tasks to which they may be assigned
- ensure that verification processes are in place to measure compliance with site positive communication procedures. Supervisors must immediately intervene at any time when the positive communication protocol is not followed.
- continue to find opportunities to eliminate unnecessary vehicle interactions onsite through segregation of traffic or permit restrictions.

Mine sites should have in place a system for receiving and reviewing safety alerts and safety bulletins from the NSW Resources Regulator.

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