



# Rail Industry Safety Notice



## RISN No. 32

### OPERATION OF LESS THAN SAFELY LOADED WAGONS

This safety notice has been published following instances of one or more wagons in a coal train consist being less than safely loaded at a coal loading point on a railway balloon loop off the main line.

This safety notice is directed to coal loading operators and rolling stock operators who are responsible for loading coal into wagons of a coal train to a safe level. Coal loading operators and rail transport operators who carry out railway operations must ensure, so far as is reasonably practicable, the safety of the railway operations.

#### Background

Over the last 20 months, a freight operator in NSW has experienced three incidents most likely attributed to “less than safely loaded vehicles entering service undetected post loading” within the train consist. In each of these cases, the empty or lightly loaded wagon has been sandwiched between two fully loaded wagons resulting in the trailing in-train longitudinal forces either lifting the wagon off its bogie(s), lifting the wagon and bogie(s) off the rail or, the precursor, the forces create a diminished wheel loading on wheelsets of the affected wagon, which heightens the risk of derailment.

On each of the above occasions, the wagon was retained in the train consist by the solid drawbar connection which prevented the consist from uncoupling, however, two of the incidents resulted in derailments. In one incident, one bogie having dislodged from the centre casting then rotated under the vehicle with a combined resultant displacement to foul the adjacent track. With the second incident, the bogie was ejected from under the vehicle and came to rest in the six foot. Fortunately, the bogie ejected within the unloading facility (ie. at the intended destination) and not on the mainline, although it still posed a serious threat.

In view of the above, it is imperative that the actual load in each wagon (in particular, those fitted with solid drawbars) is ascertained at the loading points prior to the consist entering the ARTC, RailCorp or RIC networks. Furthermore, there have been a number of other similar incidents which have either gone undetected by the coal loading operator or the rolling stock operator has not been made aware of the less than loaded wagon.



## Points to consider

- Rolling stock operators to check that suitable and sufficient information has been provided to the loading points regarding appropriate wagon loading configurations (ie. less than safely loaded thresholds) for safe operations.
- Existing controls for the majority of coal loading facilities are predominantly procedural based ie. reliance on the competency and fitness for duty (ie. drug and alcohol, fatigue management, etc) of their coal load personnel and their vulnerability to human error (or performance variability).
- Attention of coal load personnel can also be subject to distraction from other train management, mining and stockpile duties.
- A number of incidents of less than safely loaded wagons have either gone undetected and/or the train crew involved have not been informed prior to completion of the loading activity.

## Action

ITSRR requires coal loading operators and rolling stock operators to carry out their respective railway operations in relation to loading coal into wagons of a coal train to a safe level, to do so in a way that does not threaten safety. Coal loading operators and rolling stock operators should:

- identify and assess, so far as is reasonably practicable, risks to safety that may arise from railway operations in relation to the loading of coal into wagons to a safe level and the subsequent movement of the train away from the coal loading facility, and
- determine measures to manage, so far as is reasonably practicable, those risks, and
- for the purposes of those risks, seek to enter into an interface agreement with the other rail transport operator or rail transport operators.

Solutions may include the review and update of existing Interface Co-ordination Plans to clearly delineate roles and responsibilities of the affected parties, the implementation of sound, risk based engineering controls (for example, ultrasonic load profile detectors, track based load cells, etc) and the review of actions post detections/incidents.



Coal loading operators should be aware that they will be carrying out railway operations if they manage or operate rail infrastructure (such as a coal loading facility), and/or operate or cause the movement by any means, of rolling stock on the railway balloon loop. Coal loading operators who carry out railway operations in relation to loading coal into wagons of a coal train to a safe level, are subject to general duty in the *Rail Safety Act 2008* to ensure, so far as is reasonably practicable, the safety of the railway operations.

Len Neist  
**Chief Executive**