

# Safety Alert

## NOTICE TO RAIL TRANSPORT OPERATORS

RSA-2016-01

Date Issued: 24 August 2016

### SUBJECT

## Site specific risk assessments when using Road Rail Vehicles

### ISSUE

An incident with potentially serious safety concerns occurred in Western Australia following the runaway of a Road Rail Elevating Work Platform (RREWP) model type RR 14 EVO.

The RREWP was being used to install temporary rail protection screens along an overhead road rail bridge. The operator required further reach from the RREWP. In order to gain further reach the operator was required to change the configuration of the machine to provide a greater wheel base to minimise risk of the machine overturning. This is achieved by placing the main drive (rubber) wheels on the ground and raising the narrower wheelbase rail wheels.

As the main drive wheels were being lowered they were above the concrete track base but not in contact with the rail wheels. As a result, the transmission brake and drive wheel brakes could not assist the rail wheel brakes in holding the vehicle on the prevailing gradient (Figure 1).

Subsequently the RREWP rail wheel brakes were the sole braking system to hold the weight of RREWP against the gradient. The RREWP then began to roll away down the gradient gathering speed. The operator switched off power to the machine, losing all functionality. The machine travelled approximately 300m in an uncontrolled condition before stopping as a result of a further change of the gradient.

An investigation of the incident revealed that the disc brake pads on the machine were in a degraded condition leading to compromised braking efficiency. The investigation also found that a change in the configuration of the machine on site did not allow for the rubber wheels to reach the concrete track base.

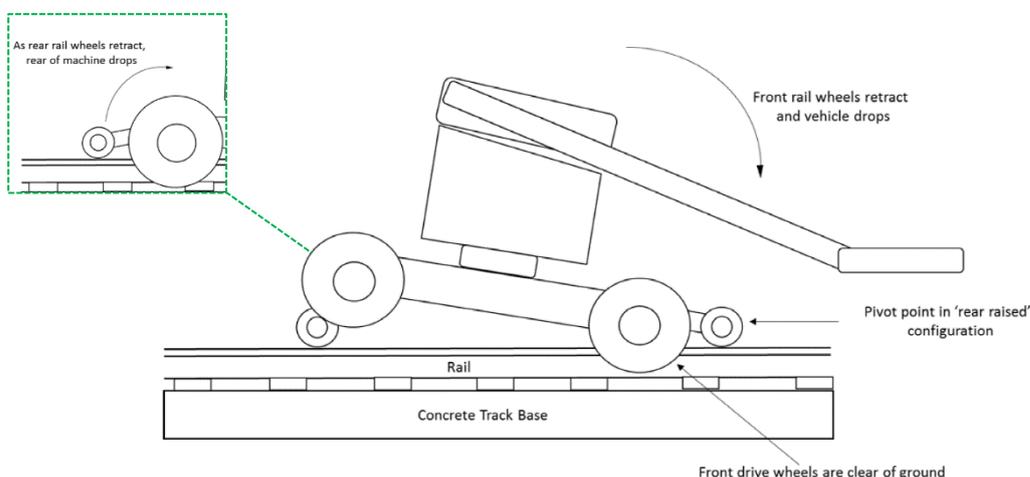


Figure 1 - As the rear drive wheels were retracted, the RREWP dropped resulting in a point in time when both the front/rear drive wheels were clear of the ground and the RREWP braking was solely reliant on the rail wheel brakes

The investigation revealed that the RREWP hi-rail brakes are only intended to hold the machine in the process of on tracking from road to rail mode and vice versa. The main drive wheels are intended to be used for the main braking function during normal operations.

**The following actions need to be taken:**

- Rail Transport Operators need to be aware of the potential for this situation to occur and conduct a site specific risk assessment to assess whether their current procedure for using RREWP considers the braking capacity of the machine is sufficient for the site where it is being used. Procedures for operation of the RREWP should be developed that are consistent with the ability of the machines braking system.
- Rail Transport Operators should also ensure that the operators of RREWP are aware of the limiting gradients that should not be exceeded when choosing to lower onsite.

**THIS ADVICE IS EFFECTIVE IMMEDIATELY**

Peter Doggett  
**Executive Director National Operations**