



TRANSPORT SA



Government  
of South Australia

## RAIL SAFETY ALERT

RSA. No.

2005-04

Page 1 of 1

### SUBJECT: SAFETY ALERT TO ALL OPERATORS OF ROAD / RAIL VEHICLES

The following information is provided in the interest of improving rail industry safety performance, and is based on best available information.

### BACKGROUND

On 2<sup>nd</sup> January 2005, a Toyota Land Cruiser 100 series hi rail vehicle derailed while travelling at or near maximum permissible speed.

While no injuries to the employees involved occurred and damage to the vehicle was limited to the hi rail equipment the incident had the potential for a serious accident.

### INVESTIGATION

While the formal investigation process into all aspects of the incident is yet to be fully completed, a significant finding to date is that a primary cause of the incident has been attributed to structural failure of the front guidance frame cross member due to cracking.

This caused the front right hand guidance wheel to lose contact with the rail resulting in the sudden loss of guidance and subsequent derailment of the vehicle.

Magnetic Particle Testing of the front and rear frames of the derailed vehicle has confirmed the presence of similar defects in all areas where the rail wheel assembly is attached to the main cross member.

Testing of a number of similar vehicles fitted with similar equipment indicates the presence of similar defects in over 50% of the vehicles tested to date.

Whilst the investigations are not yet complete, there is sufficient concern regarding safety issues to warrant notification to all operators of such equipment.

In this instance the hi-rail equipment was manufactured by Aries Equipment and Engineering. Similarly designed equipment may also be subject to the similar defects.

### SUGGESTED ACTIONS

Operators are requested to note the above matters and adopt appropriate risk management action including the implementation of appropriate operating restrictions until the level of risk has been firmly established and satisfactory action taken to reduce any unreasonable risk. For operators of Aries equipment further information may be obtained by contacting them by phone on (08) 9248 8611 or fax (08) 9248 8699.

This notice is effective from:

16 / February / 2005

Approved:

Derek Heneker  
Acting Manager, Rail Services

Date: 16/2/05