

31 January 2017

Mr Paul Retter  
Chief Executive Officer  
National Transport Commission  
Level 15/628 Bourke Street  
Melbourne VIC 3000  
Via NTC portal

## **AUSTRALIAN LIGHT VEHICLE STANDARDS RULES AMENDMENT**

Dear Paul

Gas Energy Australia (GEA) appreciates the opportunity to respond to the National Transport Commission (NTC) Australian Light Vehicle Standards Rules Amendment – Discussion Paper - December 2016.

GEA supports the key principles outlined in the Discussion Paper that hazards should be labelled to assist emergency responders and should provide a consistent and appropriate warning. Further, GEA advocates consistency in regulation and safety and considers it sensible to regulate identification symbols (eg, those used in labels on number plates) which warn of specific hazards in rescue situations.

In the case of gaseous fuels, the requirements for LPG, LNG and CNG are operating successfully and are covered in the following.

- AS1425 Liquefied Petroleum Gas (LPG) fuel systems for vehicles.
- AS2739 Natural gas (CNG & LNG) fuel systems for vehicle engines.
- Australian Dangerous Goods Code of Practice for the carriage of Dangerous Goods by Road or Rail version 7.4.
- National Heavy Vehicle requirements outlined in the National Heavy Vehicle Inspection Manual.

The Australian Dangerous Goods Code of Practice (ADG 7.4) identifies Emergency Response documentation which details how to respond to an emergency (ERG 2012 - 2012 Emergency Response Guidebook (ERG2012) – which includes emergency guide 115). The relevant emergency guide 115 applies to methane (NG) and hydrogen and as such it is logical to adopt a warning label which is consistent with those already used for gaseous fuels and identified in regulation in Australia.

The current gaseous fuels labeling requirements are outlined in the National Heavy Vehicle Inspection Manual Section 12 - <https://www.nhvr.gov.au/files/201511-0262-nhvim-section-12-lpg-and-ng-vehicles.pdf>) and are as follows.

For vehicles fuelled with LPG:

- a) The metal plate and label size shall be not less than 25mm square mounted as a diamond.
- b) The label colour shall be retroreflective red, complying with AS/NZS 1906.1, Class 2.
- c) The label shall have only the letters 'LPG' in white at least 10mm in height.

For vehicles fuelled with CNG:

- a) The metal plate and label size shall be a circle not less than 35mm diameter.
- b) The label colour shall be retroreflective red, complying with AS/NZS 1906.1, Class 2.
- c) The label shall have only the letters 'CNG' in white at least 10mm in height.

For vehicles fuelled with LNG:

- a) The metal plate and label size shall be a circle not less than 35mm diameter.
- b) The label colour shall be retroreflective standard green, complying with AS/NZS 1906.1, Class 2.
- c) The label shall have only letters 'LNG' in white at least 10mm in height.

In relation to hydrogen fuelled vehicles, where explosion is the principal risk factor, GEA considers these vehicles should be required to display a similar label as vehicles carrying gaseous fuels because of the emergency response guidance outlined in ADG 7.4 and recommends the following.

For vehicles fuelled with Hydrogen:

- a. The metal plate and label size shall be a circle not less than 35mm diameter
- b. The label colour shall be retroreflective standard yellow, complying with AS/NZS 1906.1, Class 2
- c. The label shall have only letters 'H' in white at least 10mm in height.

In relation to electric vehicles, where electric shock is the principal risk factor and given there are well established hazard warning labels which apply to this risk, GEA recommends that the NTC selects an appropriate warning label from the current Australian Standards AS1319: Safety signs for the occupational environment, as these hazard labels are already well known and understood by emergency responders. In particular, GEA suggests the appropriate sign for electric powered vehicles should be Emergency Hazard Sign 447 appropriately sized for a number plate.

In addition, to maintain consistency, GEA considers electric vehicles should have a requirement similar to the one proposed for hydrogen fuelled vehicles where a vehicle fitted with two or more tanks would require two labels to be fitted. Gas Energy Australia recommends that the warning requirements for Electric Vehicles be consistent with hydrogen and where two or more battery packs are fitted, two emergency labels should be required.

### **Conclusion and recommendations**

GEA supports the principle of warning emergency responders of the principal hazard and recommends:

- hydrogen vehicles display a label consistent with other gaseous fuels as outlined above;
- electric vehicles display an appropriately sized Emergency Hazard Sign 447 from AS1319: Safety signs for the occupational environment; and
- where two or more battery packs are fitted, two emergency labels for an electric vehicle should be required.

In closing, GEA strongly endorses consistency and uniformity in hazard labelling and urges the NTC to recommend emergency hazard labels which clearly warn of the principal danger and not be swayed by those advocating marketing labels.

Yours sincerely



John Griffiths  
Chief Executive Officer  
Gas Energy Australia