

Australian/New Zealand Standard™

The storage and handling of LP Gas



AS/NZS 1596:2014

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee ME-015, Storage and Handling—Liquefied Petroleum Gases. It was approved on behalf of the Council of Standards Australia on 14 April 2014 and on behalf of the Standards Council of New Zealand on 27 March 2014. This Standard was published on 19 May 2014.

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Department of Mines and Petroleum, WA
Department of the Premier and Cabinet, SA
Energy Safety, WA
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Australian/New Zealand Standard

The storage and handling of LP Gas

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME-015, Storage and Handling—Liquefied Petroleum Gases, to supersede AS/NZS 1596:2008, *The storage and handling of LP Gas*.

This Standard incorporates Amendment No. 1 (August 2017). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

This edition is the result of a comprehensive review of the 2008 edition, in order to update procedures in light of industry best practice, and correct and update references.

A1 | Appendix Q, ‘Impact protection’, for assessing the requirements for the protection of tanks and cylinders from impact, has been changed from informative to normative (in Australia only), with some modifications, by Amendment No. 1:2017.

A new informative Appendix, ‘Transport of portable LP Gas cylinders for trade use’, covering the transport of cylinders for trade use, has been included. This has drawn heavily on safety notes and bulletins produced by various government bodies following an increase in safety incidents in this area. Addressing additional safety concerns regarding the hazardous nature of working in underground pits, a number of changes have been made in this area.

Appendix K has been reviewed to bring the emergency planning aspects of the Standard in line with current emergency services terminology and practice.

A1 | A new informative Appendix R, ‘Odour management’ has been introduced to provide guidance for the management of odour in LP Gas through the supply chain to reduce the risk of odour fade.

A significant number of minor changes have been made to align the Standard with New Zealand regulatory practice and it is envisaged that the Standard may be called up in legislation in New Zealand in the future.

This Standard has been revised in terms of safety and technical matters. The regulatory authorities in each state and territory determine how and when Standards are to be applied. The method of application may be full, part, with or without modifications or not at all. This application is not limited by the Standard. The relevant regulatory authority should be consulted regarding the application of this Standard.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

Where Australian and New Zealand references are separated by the word ‘or’, a slash (/) or parentheses, Australian references apply in Australia, and New Zealand references apply in New Zealand. Joint Standards apply in both Australia and New Zealand.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE AND OBJECTIVE

This Standard specifies requirements for the location, design, construction, commissioning and operation of installations for the storage and handling of LP Gas, and includes the management of emergencies.

The objective of this Standard is to provide designers, planners, operators and regulators with technical and procedural requirements for installations for the safe storage and handling of LP Gas.

1.2 APPLICATION**1.2.1 Application of Standard**

This Standard shall be read as defining the minimum requirements of acceptability.

This Standard applies to installations commenced after its publication date. Unless specifically indicated in this Standard, it shall not apply to existing installations.

NOTE: 'Commenced', for the purpose of this Clause, means the point at which site or equipment construction has begun.

A1 | This Standard applies up to the outlet of the first regulator in the vapour supply system including any integral two stage regulator.

The relevant authority having jurisdiction may determine the extent of application of this Standard.

This Standard does not apply to the following situations:

- (a) Refrigerated storage of LP Gas.
- (b) Underground storage of LP Gas in mined caverns or geological formations.
- (c) Plant or equipment in which LP Gas is processed or produced, or vessels that form an integral part of that processing equipment (but does include post manufacturing storage).
- (d) Industrial gas-consuming equipment (see AS 3814 or AS/NZS 5601.1).
- (e) Automotive installations, as addressed in AS/NZS 1425 and AS 4983.

A1 | (f) Refrigerating systems, as addressed in the AS/NZS 5149 series.

(g) Land transport equipment and operations, as covered—

- (i) in Australia, by the ADG Code (but excluding references to this Standard that appear in the ADG Code) and AS 2809, Parts 1 and 3; or
- (ii) in New Zealand, a road tank wagon shall be constructed in accordance with the *Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004*. The *Code of Practice HSNOCOP 29, Flammable Gases and Oxygen Tank Wagons*—A code of practice for the design and construction of vehicles for bulk transport of flammable gases and oxygen by road is a means of compliance. Land transport shall be consistent with the *Land Transport Rule: Dangerous Goods 2005*, as amended.