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CSA B149.2:20
National Standard of Canada

Propane storage and handling code

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Interprovincial Gas Advisory Council

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Preface

This is the twelfth edition of CSA B149.2, *Propane storage and handling code*. It supersedes the previous editions, published in 2015, 2010, 2005, and 2000 by CSA Group (CSA) as CAN/CSA-B149.2, in 1995, 1991, 1986, 1980, 1978, and 1976 by the Canadian Gas Association (CGA), and in 1969 by CSA Group.

The main changes from the previous edition are as follows:

a) updated Code Scope exclusions (Clause 1.2);
b) updated reference publications (Clause 2);
c) added requirements for cylinders used on hot air balloon applications (Clauses 6.1.12 and 6.4.7 to 6.4.10;
d) updated requirements for cylinder exchange (Clauses 6.4.5, 6.5.1.8, 6.5.2.6.1, and 6.5.2.6.2);
e) added requirements for handling of cylinders at shows, exhibitions, or other similar events (Clause 6.10 and Annex Q);
f) added requirements for handling of cylinders in classrooms (Clause 6.11 and Annex O);
g) added requirements for underground tank installations (Clause 7.8.19);
h) updated requirements for tank location and support (Clauses 7.10.2, 7.10.3, and 7.11.3 and Table 7.4);
i) updated requirements for signage at filling plants and refill centres (Clause 7.12.10);
j) updated requirements for protection against vehicular traffic (Clauses 7.19.4.2 and 7.19.4.5);
k) updated requirements for vehicle fuel dispensers (Clauses 7.20.12 and 7.20.13);
l) updated requirements for vaporizers (Clause 9.1.10, 9.2.4, and 9.3.5); and
m) added Annex R — "Inspection and servicing of pressure relief devices on tanks".

This Code was prepared by the Technical Committee on Propane Storage and Handling, under the Fuels and Appliances Strategic Steering Committee, and has been formally approved by the Technical Committee and the Interprovincial Gas Advisory Council.

This Code has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

Notes:

1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
2) *Although the intended primary application of this Code is stated in its Scope, it is important to note that it remains the responsibility of the users of the Code to judge its suitability for their particular purpose.*
3) *This Code was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Code.*
4) *To submit a request for interpretation of this Code, please send the following information to inquiries@csagroup.org and include "Request for interpretation" in the subject line:*
   a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
   b) *provide an explanation of circumstances surrounding the actual field condition; and*
   c) *where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*

   Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are available on the* Current Standards Activities *page at standardsactivities.csa.ca.*

5) *This Code is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include "Proposal for change" in the subject line:*
   a) *Code designation (number);*
   b) *relevant clause, table, and/or figure number;*
   c) *wording of the proposed change; and*
   d) *rationale for the change.*

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0 Introduction

In 1958, the Canadian Standards Association published the first edition of CSA B149, *Installation Code for Gas Burning Appliances and Equipment*. It was superseded by later editions in 1962, 1966, and 1971.

Following the publication of the 1966 edition, the decision was made to split the Code into two parts: the first part, B149.1, dealing with the installation requirements for appliances and equipment burning natural gas; the second part, B149.2, dealing with the installation of appliances and equipment burning propane. As a first step, B149.2 was prepared and first published in 1969.

The Canadian Gas Association was accredited by the Standards Council of Canada as the standards development organization responsible for preparing standards for gas-burning appliances and equipment, and in this connection took over responsibility for the B149 Code in 1974. New editions of the Code were subsequently published in 1976, 1978, 1980, 1986, 1991, and 1995.

On June 30, 1997, the Canadian Standards Association acquired International Approval Services (IAS), which was until then a joint venture of the American Gas Association (AGA) and the Canadian Gas Association. Under this agreement, CSA acquired the complete range of IAS standards administration, certification, and registration products and services for appliances and accessories fuelled by natural and liquefied petroleum gases. In 1998, the CSA B149 Installation Code Committee agreed to publish a *Natural Gas and Propane Installation Code* that would amalgamate the first seven sections of CAN/CGA-B149.1 and CAN/CGA-B149.2 to become CSA B149.1-00. This amalgamation was in response to the trend among the authorities having jurisdiction of combining licensing and training for natural gas and propane. The remaining sections 8 to 14 of CAN/CGA-B149.2 became CSA B149.2-00, *Propane Storage and Handling Code*.

1 Scope

1.1

This Code applies to

a) the storage, handling, and transfer of propane;
b) propane used as an engine fuel in other than motor vehicles; and
c) the installation, operation, and maintenance of containers and equipment to be used for propane at customer locations, in distribution locations and filling plants.

1.2

This Code does not apply to

a) transportation of propane;
b) manufacture, selection, and use of standardized means of containment under the *Transportation of Dangerous Goods Act* and *Regulations;*
c) new containers which have not contained propane or used containers identified as having been purged to less than 5% of the LEL as determined by a calibrated gas meter;
d) marine or pipeline terminals;

