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CSA B108.1:23
National Standard of Canada

Compressed natural gas refuelling stations installation code

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Compressed natural gas refuelling stations installation code

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Preface

This is the second edition of CSA B108.1, *Compressed natural gas refuelling stations installation code*. It supersedes the previous editions published in 2021 and 2018 as Part 1 of CSA B108, *Natural gas refuelling stations installation code*, and in 2014, 1999, and 1995 as CSA B108, *Compressed natural gas fuelling stations installation code*.

CSA B108.1 is applicable to compressed natural gas (CNG) refuelling stations. CSA B108.2 is applicable to liquefied natural gas (LNG) refuelling stations, including LNG to CNG conversion systems. CSA B108.2 supersedes Annex D of CSA Z276, *Liquefied natural gas (LN) — Production, storage, and handling*.

The following are the major changes to this edition:

a) expansion of Scope to include CNG bulk transport filling and decanting stations;
b) clarification of the terms “VRA”, “VFA”, and “RFA” to address new standard terminology and legacy equipment, and the addition of new terms that address all three appliance types (i.e., refuelling appliances);
c) significant changes to electrical classified zones based on IEC 60079-10-1:2020, and to ventilation rates and more detailed definitions of wall types;
d) clarifications between electrical classified zones and fire setbacks, and the use of walls within these areas;
e) clarification of the setbacks and electrical classification regarding relief device and blowdown vent points;
f) expanded requirements for piping installation to conform with practices described in CSA B149.1;
g) addition of Annex A on operation, maintenance, and personnel training;
h) editorial revisions to
    i) clarify wording and references, tables, and figures;
    ii) resolve conflicts identified with other documents;
    iii) provide consistency and clarification between this Code and CSA B108.2;
    iv) correct metrication values; and
    v) harmonize definitions with other industry codes and standards;
i) reorganization and revisions of content for consistency of organization between this Code and CSA B108.2; and
j) clarification of definitions and requirements.

CSA Group acknowledges that the development of this Code was made possible, in part, by the financial support of Natural Resources Canada.

This Code was prepared by the Subcommittee on Natural Gas for Vehicle Refuelling Stations Installation Code, under the jurisdiction of the Technical Committee on Natural Gas Transportation and the Strategic Steering Committee on Transportation, and has been formally approved by the Technical Committee.

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*