



Fuels Safety Program	Ref. No.: FS-254-20
Propane Code Adoption Document Amendment	Publication Date: December 8 th , 2020 Effective Date: February 8 th , 2021

IN THE MATTER OF:

Technical Standards and Safety Act 2000, S.O. 2000, c. 16,
Ontario Regulation 223/01 (Codes and Standards Adopted by Reference), *and*
Ontario Regulation 211/01 (Propane Storage and Handling)

The Director for the purposes of Ontario Regulation 211/01 (Propane Storage and Handling), pursuant to section 9(1) of Ontario Regulation 223/01 (Codes and Standards Adopted by Reference), hereby provides notice that the PROPANE CODE ADOPTION DOCUMENT published by the Technical Standards and Safety Authority and dated June 1, 2001, as amended, is further amended as follows:

All sections of the Propane Code Adoption Document previously published are revoked and replaced with the following:

Notes:

All deleted clauses and Appendices are now contained in CSA-B149.1-20, B149.2-20 and B149.5-20 except for clause 6.11 and Annex P which were deleted from the CAD as per the recommendations of the Propane RRG Working Group.

Background:

This amendment to the Propane Code Adoption Document (CAD) revokes and replaces the previous amendment (FS-224-17, dated April 10, 2017). Background information is included for the provisions.

This CAD amendment adopts new requirements approved by the CSA B149.1, B149.2 and B149.5 Code Committees for the 2020 Code that are considered important to be implemented in Ontario now and addresses gaps in the current codes to enhance safety.

Major changes in this version include the following:

- Adoption of B149.2- 20 for propane storage and handling requirements (Item 1)
- Adoption of, B149.5- 20 for propane vehicle conversion requirements (Item 2)
- Adoption of B149.1- 20 for appliances and equipment on highway vehicles, mobile units, etc. when propane is used for fuel purpose (Item 3)
- Adoption of TSSA-FA-2020 - Field Approval Code for appliances on those units that are not approved (Item 4)
- Adoption of Mobile Food Service Equipment Code for appliances on those units that are not approved (Item 5)

1. The CSA Standard B149.2-20 “Propane Storage and Handling Code” published in January 2020 by the Canadian Standards Association is adopted with the following amendments:

1.1 Clause 3 is amended by revoking the definitions of “Appliance”, “Approved”, and “**Authority having jurisdiction**”

△

1.2 Clause 3 is amended by adding the following definitions:

Authority having jurisdiction — the Director designated for the purposes of O. Reg. 211/01 (Propane Storage and Handling).

Cylinder exchange - a type of a propane cylinder handling facility where propane in refillable **cylinders** are sold or otherwise distributed to an end user.

1.3 Clause 4.1.4 is revoked and the following substituted:

4.1.4

Where a conflict exists between the manufacturer’s **certified** instructions and this Code, the requirements of this Code shall prevail unless otherwise **approved** by the **authority having jurisdiction**.

1.4 Clause 4.2.3 is revoked and the following substituted:

4.2.3

The approval of the assembly or construction of an **appliance** is subject to the **authority having jurisdiction**. (See TSSA Field Approval Code, TSSA-FA-2020).

1.5 **Clause 6.5.2.6 is amended by adding the following:**

6.5.2.6.3

Cylinder exchange shall have cylinders stored in no more than four (4) cabinets and each cabinet shall contain no more than 500 lbs of propane.

Δ1.6 Clause 7.1 is amended by adding

7.1.17

All installed tanks shall require a recorded tank inspection every 10 years, in accordance with National Board Inspection Code (NBIC) inspection and acceptance criteria.

1.7 Clause 7.2 is amended by adding

7.2.6

Pressure relief valves (PRV) of tanks shall be visually inspected periodically to ensure that there are no impediments that will prevent them from operating properly. The frequency of the periodic visual inspection depends on the operating environment and the manufacture's recommendation.

7.2.7

The PRV inspection shall be recorded at a minimum interval of every five (5) years. The record shall include the date of inspection and the person carrying out the inspection. The inspection will ensure that:

- The outlet and, where applicable, weep hole are open and free to discharge;
- There are no signs of corrosion, cracks, debris, tampering, or other mechanical damage;
- There is no leakage;
- The discharge is directed to a safe location, and any piping installed is adequately supported and does not obstruct the discharge;
- The seal (where applicable) has not been broken;
- The rain cap, where applicable, has been installed.

7.2.8

Tanks of greater than 2,500 USWG shall have the relief valves rebuilt/certified or replaced every 10 years. All overdue relief valves shall be rebuilt/certified or replaced by May 1, 2024.

7.2.9

Tanks of 2,500 USWG or less shall have the relief valves rebuilt/certified or replaced every 25 years. All overdue relief valves shall be rebuilt/certified or replaced by May 1, 2027.

7.2.10

Tank owners shall have a plan that provides an achievable pathway for full compliance as per Clause 7.2.8 and 7.2.9 within the implementation periods stated above.

7.2.11

Within a ten (10) year period from the implementation of these requirements (seven [7] years for tanks of greater than 2500 USWG), each owner should keep records of the PRV* for each in-service tank, including

- The name of the PRV manufacturer;
- The date on which the PRV was put into service;
- Approval stamp - the PRV must have the UL code symbol on it in accordance with the applicable design code (ANSI/UL 132);
- A record that the set pressure of the PRV meets the specified requirements for the tank;
- A record that the relief capacity in SCFM air conforms to the appropriate rate for the size of the tank; and
- Records of this information shall be held by the distributor and may be kept in hard copy or electronic format.

**Not all valves will have a name plate. If there is no nameplate the markings are stamped into the body of the valve. All valves should be marked with the manufacturer's name or an abbreviation, the manufacturer's part number, set pressure, capacity, date or date code for year of manufacture, and the UL rating code symbol.*

2. The **CSA Standard B149.5-20 "Installation code for propane fuel systems and containers on motor vehicles"** published in January 2020 by the Canadian Standards Association is adopted with the following amendments:

2.1 Clause 3 is amended by revoking the definitions of "Approved" and "Authority having jurisdiction".

2.2 Clause 3 is amended by adding to it the following definition:

Authority having jurisdiction — the Director designated for the purposes of O. Reg. 211/01 (Propane Storage and Handling).

2.3 Clause 4.1.5 is revoked and the following substituted:

4.1.5

Where a conflict exists between the manufacturer's **certified** instructions and this code, the requirements of this code shall prevail unless otherwise approved by the authority having jurisdiction.

2.4 Subclause 5.12 is amended by adding the following:

5.12.6

Fuel systems shall be inspected every five years in accordance with B149.5-20 Annex E.

5.12.7

A label applied in accordance with 5.13.1 shall show an expiry date of 5 years after the date of conversion or inspection.

5.12.8

Where a label described in 5.13.1 is missing or lost, a new label may be applied showing the remaining time until expiry without a vehicle inspection, provided that documentation is provided of the vehicle conversion or most recent vehicle inspection date.

5.12.9

The inspection required in 5.13.6 shall be carried out by a holder of a valid Internal Combustion Alternate Fuel Technician, Propane (ICE-P) certificate. The inspection shall be carried out at a registered vehicle conversion centre.

5.12.10

△ Propane conversion centres shall keep records of the vehicles that have been converted or inspected. Records shall include

1. Date of conversion/inspection,
2. VIN number, licence plate number and the make and model of vehicle,
3. TSSA label numbers (TSSA issued door label and window label number),
4. Certificate holder name who did the conversion, and
5. Bill of Materials (BOM) of the conversion.

△ 3. The **CSA Standard B149.1- 20 “Natural gas and propane installation code”** published in January 2020 by the Canadian Standards Association is adopted for the installation requirements for mobile homes and recreational vehicles.

△ 4. The TSSA **Field Approval Code**, TSSA-FA-2020, is adopted for the approval of assembly or construction of an appliance.

△ 5. The TSSA **Mobile Food Service Equipment Code**, TSSA-MFSE- 2020, is adopted for the approval of mobile food service equipment.

These amendments are effective February 8th, 2021.

Signed at Toronto this eighth day of December, 2020.

ORIGINAL SIGNED

Sam Sadeghi

Director, O. Reg. 211/01 (Propane Storage and Handling)

*Any person involved in an activity, process or procedure to which this document applies shall comply with this document.
This document was developed in consultation with the TSSA Propane Council and the TSSA Propane Risk Reduction Group*

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