

**Fuels Safety Program** 

Propane Code Adoption Document Amendment

February 1, 2017

FS-224-17

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:

# Background:

This amendment to the Propane Code Adoption Document (CAD) revokes and replaces the previous amendment (FS-211-14, dated August 1, 2014). A delta symbol ( $\Delta$ ) in the margin indicates a provision that is new or that has been changed by this CAD amendment. Background information is included for such new or changed provisions.

This CAD amendment adopts new requirements approved by the B149.1, B149.2 and B149.5 Code Committees for the 2015 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 B149.2-15 for propane storage and handling requirements (Item 1)
- Adoption of, B149.5-15 for propane vehicle conversion requirements (Item 2)
- Adoption of B149.1-15 for appliances and equipment on highway vehicles, mobile units, etc. when propane is used for fuel purpose (moved from B149.2 to B149.1 in 2015) (Item 3)
- Adoption of Field Approval Code for appliances on those units that are not approved (Item 4)
- Adoption of Mobile Food Unit Approval Code for appliances on those units that are not approved (Item 5)
- Exemption of vehicular protection for cylinders of 20 lb. or less stored in cabinets (Item 1.12)
- New requirements for inspection of tanks and inspection/replacement of relief valves (Item 1.14 and 1.15)
- Annex Q is added for requirements for use of non-refillable cylinders in classrooms in schools (Item 1.13 and 1.22).

**1.** The CSA Standard B149.2-15 "Propane Storage and Handling Code" published in August 2015 by the Canadian Standards Association is adopted with the following amendments:

## 1.1 Clause 1.2 is amended by adding the following sub-clause:

(I) propane used as refrigerant.

## 1.2 Clause 3 is amended by revoking the definitions of "Appliance", "Approved", and "Authority having jurisdiction"

## $\Delta$ 1.3 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.

#### Background:

To clarify what constitutes a cylinder exchange for the purpose of licensing and the respective requirements (see also Item1.10).

## 1.4 Clause 4.1.4 is revoked and substituted with the following:

#### 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*.

#### 1.5 Clause 4.2.3 is revoked and substituted with the following:

#### 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-2015).

# $\Delta$ 1.6 Clauses 5.11.3, 5.11.4 and 5.11.5 are revoked and substituted with the following:

#### 5.11.3

When an *equipment*, such as an industrial tractor, lift truck or ice maintenance *equipment*, is fuelled with propane and is used indoors, the area shall be ventilated in accordance with the requirement of Table 5.1.

#### Background:

To clarify that all equipment fuelled with propane, including ice resurfacing machines and ice edging equipment, is subject to the same requirements.

# 5.11.4

It shall be the responsibility of the supplier of the *equipment* to inform the user of the ventilation requirements of Clause 5.11.3

# 5.11.5

It shall be the responsibility of the user to remove from service any propane fueled *equipment* where the *equipment* or container is damaged or malfunctioning.

### 1.7 Clause 6.1.14 is revoked and substituted with the following:

## 6.1.14

**Cylinders** requalified in accordance with Clause 6.1.5 and with a propane capacity of 40 lb. (18 kg) or less shall be equipped with a *cylinder valve* that does not permit the flow of propane until a positive seal has been achieved. Industrial cylinders manufactured under specification TC-4BWM18 are exempt from this requirement when used in cutting or welding applications. When requalifying TC-4BWM18 *cylinders*, valve replacement may be made by using a valve outlet conforming to the CGA 510 standard, not requiring a positive seal and with a PRV set at 405 psi.

## 1.8 Clause 6.4.4 is revoked and substituted with the following:

## 6.4.4

(a) If a *cylinder* has a sleeve, it shall be removed to facilitate the visual inspection prior to filling the *cylinder*.

(b) A *cylinder* that is damaged, leaking, or corroded beyond TC limits, or is due for a prescribed re-examination, shall not be filled but shall be removed from service.

# $\Delta$ 1.9 Clause 6.5.2.6.1 (e) is revoked and substituted with the following:

e) Electrical equipment within 5 ft. (1.5 m) of *cylinder exchange* cabinets shall have a rating according to the Canadian Electrical Code, Part 1, Class 1, Group IIA, Zone 2.

Note: This supersedes Part K (b) of Table 7.6

# Background:

The same requirement of having 5 ft. separation distance for cages from the source of ignition as agreed in the previous CAD is maintained.

# $\Delta$ 1.10 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 lb. of propane.

# $\Delta$ 1.11 Clause 6.5.3.8 is revoked and substituted with the following:

#### 6.5.3.8

Moving a propane cylinder from one level to another level, or to the roof of a building, may be done using

- (a) a freight, service elevator, or construction hoist; or
- (b) a public passenger elevator, provided only the person(s) involved with the cylinder are in the elevator.

When moving a propane cylinder to or from the roof or one level to another of a building, each cylinder valve outlet shall be closed and plugged, and the valve protective cap or collar shall be in place. (See also Clause 6.1)

# Background:

The use of passenger escalators in sub-clause (b) is removed as it is not an acceptable practice.

# $\Delta$ 1.12 Clause 6.5.4.2 is amended by adding the following:

**Exception:** Vehicle impact protection shall not be required for protection of 20 lb. propane cylinders where the cylinders are kept in lockable, ventilated cabinets of metal construction.

#### Background:

Propane Education and Research Council confirmed that protection is unnecessary for 20 lb. cylinders. The same requirements were adopted in the International Fire Code (IFC) and in the process of adoption in the National Fire Protection Code (NFPA) in the US.

## 1.13 Clause 6 is amended by adding the following:

# 6.10 Requirements for Operation of Appliances and Cylinders at Shows, Exhibitions or other Similar Events

The operation of appliances and cylinders at shows, exhibitions, or other similar events shall comply with Annex J of CSA-B149.1-15 as adopted by the Gaseous Fuel Code Adoption Document published by the Technical Standards & Safety Authority.

#### 6.11 Filling cylinders under 100 lbs. from bulk trucks

The filling of *cylinders* under 100 lbs. from bulk trucks shall comply with Annex P of this Code.

#### Δ

# 6.12 Handling of Cylinders in Classrooms

The handling of cylinders in classrooms shall comply with Annex Q of this Code.

#### Background:

To provide clear requirements for use of portable cylinders and small appliances in classrooms, based on the requirements published in a Director's Order in 1997 to clarify certain issues.

# $\Delta$ 1.14 Clause 7.1 is amended by adding the following:

# 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.

# Background:

New requirements as agreed between the TSSA Pressure Vessel Advisory Council and TSSA Propane Advisory Council to be in line with the practice of the pressure vessel industry and taking into consideration the propane industry practice of regular inspection during operation.

TSSA licensed storage facilities (e.g. bulk plants) currently require a recorded annual inspection, which includes tank(s), and undergo a periodic inspection, on a 6-36 month interval, by the TSSA Fuels Safety Division.

# $\Delta$ 1.15 Clause 7.2 is amended by adding the following:

## 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 manufacturer's recommendation.

## Background:

The wording of B51-14 has been adopted to allow the flexibility in the frequency of visual inspections.

## 7.2.7

Pressure relief valve (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.

#### Background:

This specifies clearly that the relief valves need to be inspected regularly and spells out clearly what needs to be inspected. The requirements of inspection/servicing were published on the CSA-B51-14 and were reviewed by both the TSSA Pressure Vessel Council and the Propane Advisory Council.

A recorded inspection is required to ensure the regular inspection is performed satisfactorily. The 5year interval will tie in the 10-year replacement requirement as listed in 7.2.6 and 7.2.7 above.

## 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 develop 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. The plan shall be developed by November 1, 2017.

## Background:

In line with the national requirements to have plans as soon as possible, Alberta mandated that plans be ready by December 31, 2015. In view that this CAD will be effective on May 1, 2017, 6 months are permitted for plan development.

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 pressure relief valve (PRV)\* for each in-service tank, including

- o The name of the pressure relief valve (PRV) manufacturer;
- o The date on which the pressure relief valve (PRV) was put into service ;
- Approval stamp the pressure relief valve (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 pressure relief valve (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 nameplate. 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.

#### Background:

To adopt the requirements in the new edition of B51-14 and allow a grace period of seven (7) years for tanks greater than 2,500 USWG and ten (10) years for tanks of 2,500 or less. Each operating company should have a plan and start acting as soon as these requirements come into effect.

# 1.16 Clause 7.8.1 is revoked and substituted with the following:

# 7.8.1

A *tank* shall be installed underground in accordance with the manufacturer's instructions and the requirements of this section.

## 1.17 Clause 7.12.6 is revoked and substituted with the following:

#### 7.12.6

In heavily populated or congested areas, the *authority having jurisdiction* may determine restrictions on individual *tank* capacity, total storage, parking of *tank trailers* and *cargo liners*, distance to line of adjoining property, and other requirements. The *filling plants* and *refill centres* shall comply with the requirements in Branch Standard No. 9 or a full risk and safety management plan prepared by a Professional Engineer acceptable to the *authority having jurisdiction*.

#### 1.18 Sub clause 7.19.4.2(b) is amended by adding the following sentence:

Alternatively, the Ontario Provincial Standard Drawing precast concrete barrier (OPSD-920.010 or 920.014, 911.140) may be used.

#### 1.19 Clause 7.19.4 is amended by adding the following clause:

#### 7.19.4.5

Protection of *tanks* used to supply propane to *buildings* or sites under construction, repair or improvement may be accomplished by the installation of posts, guardrails or reinforced concrete barriers as required in clauses 7.19.4.1, 7.19.4.2 and 7.19.4.3 or by using:

(a) concrete castings, weighting at least 900 lbs. (410 kg) and not less than 30 inches (750 mm) in height. Any opening between barriers shall not exceed 54 inches (1350 mm),

(b) a continuous berm pile having a minimum height of 36 inches (900 mm), or (c) other means of protection that are equivalent to the protection requirements of 7.19.4.1, 7.19.4.2 and 7.19.4.3 shall be approved by TSSA.

Distances between barriers and *tanks* shall be in compliance with the typical illustrations shown in Annex B.

#### Background:

New (c) added to provide flexibility for different protection arrangements.

#### 1.20 Clause 8.6.3 is amended by adding the following:

(c) Notwithstanding (a) or (b), a *tank truck*, *tank trailer* or *cargo liner* carrying propane shall not be parked and used for storage in a congested or heavily populated area or within 50 ft. of a *building* used for assembly, care, detention or multiple residential occupancy.

#### 1.21 The annexes are amended by adding Annex P as follows:

#### Annex P

Conditions for Filling Cylinders under 100 lbs. from Bulk Trucks

#### P1

Section 27 of O. Reg. 211/01 establishes the conditions for *filling plants* and *container refill centres*. In summary, the following is required:

#### P1.1

• Subsection 27(1) requires that each facility is licensed;

- Subsection 27(3)(c) requires a letter from the local municipality stating that the proposed site does not contravene the zoning by-laws; and
- Subsection 27(3) (d) requires drawings for each site.

#### P1.2

Each application shall be approved in accordance with the requirements of O. Reg. 211/01 under the *Technical Standards and Safety Act, 2000*, and the conditions outlined below. Nonconformity with any of the conditions specified shall thereby cause the approval to lapse.

#### P1.3

Each proposed site shall be approved. Drawings shall be submitted in accordance with O. Reg. 211/01, s. 27(3) (d).

#### P1.4

Applications must include a letter from the local municipality stating that the refueling of propane *cylinders* does not contravene any applicable zoning bylaws.

#### P1.5

Calculations shall be submitted confirming that Branch Standard No. 9 has been met.

#### P1.6

*Cylinders* shall be secured in place by a mechanical means, such as straps or chains, when being filled.

#### Background:

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To specify and clarify means of securing cylinders.

#### P1.7

Hoses used for refueling the *cylinders* shall be of the type used in *container refill centres*.

#### P1.8

The refilling of *cylinders* shall be performed in accordance with written procedures for refilling *cylinders* from a bulk truck.

#### $\Delta$ 1.22 The annexes are amended by adding Annex Q as follows:

#### Annex Q

Use of Non-Refillable Propane Cylinders in Laboratories/Classrooms in Schools, Colleges and Universities

#### Q1 Scope/General Requirements

#### Q1.1

These requirements apply to the Use of Non-Refillable Propane Cylinders in laboratories/Classrooms in Schools, Colleges and Universities

#### Q1.2

Instead of permanently installed gas systems feeding gas outlets for small appliances such as portable Bunsen burners, the appliances may be connected to non-refillable cylinders in accordance with the conditions described below.

# Q1.3

The appliances and cylinders shall be used for educational and instructional purposes only.

# Q1.4

Propane cylinders shall be of the approved non-refillable type (TC-39, TC-2P and TC-2Q), commonly referred to as "single-trip" – with the maximum capacity of 16 oz.

# Q2 Classroom Quantities

# Q2.1

No more than the quantity of cylinders required to fuel the appliance shall be brought into the laboratory/classroom.

# Q2.2

Not more than 20 cylinders may be connected for use in a laboratory/classroom at one time or one (1) cylinder to every two (2) students, whichever number is lower.

# Q3 Classroom/ Laboratory Use

# Q3.1

Cylinders shall either be directly connected to the appliance or with an approved hose.

# Q3.2

Only one cylinder per appliance shall be used.

# Q3.3

An appliance connected to a cylinder shall not be located so as to obstruct an entrance or exit of a laboratory or the pathway to such an exit or entrance or a stairway.

# Q3.4

The appliances/cylinders shall be secured by the use of non-combustible stand or equivalent so as to prevent accidental tip over.

# Q3.5

A leak test, using a leak detection solution or a gas detector, shall be carried out on all connections each time the cylinder is connected to the appliance for use. A source of ignition shall not be used to check for leaks.

# Q3.6

At no time can appliances and cylinders be moved from the work station while operating.

# Q3.7

Appliances shall be disconnected at the end of class.

# Q3.8

Cylinders connections shall be leak tested immediately after disconnection.

# Q3.9

A portable fire extinguisher classified not less than 10 BC shall be located in each laboratory/classroom where the appliances and cylinders are used.

# Q4 Training and Responsibilities

## Q4.1

The instructor/teacher shall be in control of the operation of all appliances and cylinders to ensure safe operation and handling.

# Q4.2

All instructors and teachers supervising the use of these cylinders shall be trained and knowledgeable in the safe use of both the appliances and cylinders.

# Q4.3

Students shall not be allowed to connect or disconnect cylinders until they have been properly trained on the connecting/disconnecting procedure of a cylinder to an appliance.

## **Q5** Cylinder Storage and Removal

## Q5.1

No cylinders shall be stored overnight in the laboratory/classroom that is not designed for cylinder storage.

# Q5.2

All cylinders, used and spares shall be stored overnight in accordance with the Ontario Propane Code either outdoors or indoors in a special cylinder storage room-

## Q5.3

All cylinders that have been depleted of their product shall be treated the same as full or partly full and the storage and handling of them shall be in accordance with CSA-B149.2-15

## Background:

See 1.12 (New added Clause 6.12 for CSA-B149.2-15).

2. The CSA Standard B149.5-15 "Installation code for propane fuel systems and containers on motor vehicles" published in August 2015 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 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 substituted with the following:

# 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.

#### $\Delta$ 2.4 Clause 5.3.4.3 is revoked and substituted with the following:

#### 5.3.4.3

When the filling connection is remote from the container, the backflow prevention system shall be one of the following, and shall be equipped with a secure protective cap:

- (a) A single back check valve other than the metal-to-metal type at the filler connection plus a double back check valve of the internal type at the container (one seat of the double back check valve shall be other than the metal-to-metal type);
- (b) Double back check valves at both the container and filler connection (one seat of each back check valve shall be other than the metal-to-metal type) with the container back check valve of the internal type; or
- (c) On a removable *container*, the filler *valve* may be a hand-operated shut-off *valve* with an *internal excess-flow valve*. The main shut-off *valves* on the container liquid and vapour lines shall be *readily accessible*.

## Background:

To remove the requirement for a screw on protective cap (replaced with secure protective cap) to allow for the use of the latest Euro fill system that is safe and widely used in Europe.

#### 2.5 Clause 5.3.5.6 is revoked and substituted with the following:

#### 5.3.5.6

A *shut-off valve* on a *tank* shall be accessible; the removal of any cover shall not require the use of tools.

## $\Delta$ 2.6 Clause 5.4.7 is revoked and substituted with the following:

#### 5.4.7

All tank attachment bolts shall have self-locking nuts or equivalent, protruding through any nut with a minimum of one diameter of threads exposed. No bolts shall be cut to size thermally and shall be a minimum of grade 5 type. Where a bolt passes through a sheet metal portion of the vehicle, a backup metallic reinforcing plate shall be provided. The backup metallic reinforcing plate shall be compatible with the vehicle material. This plate shall be a minimum 0.1 in (2.5 mm) thick with an area of at least 6 in2 (3870 mm2). Sheet metal screws shall not be used as an attaching component, and where attachment is to a chassis of a unibody vehicle, existing frame holes shall be used where possible. Support to prevent the weakening of the frame members shall be provided. Material used for reinforcement shall be of steel and have a minimum thickness of 0.125 in (3.8 mm) and a diameter four times the diameter of the hole. Corrosion protection shall be applied to drilled and metal-reinforced areas. See Annex B and Figure B1.

# Background:

To clarify what is an acceptable practice for self-locking nuts and allow metallic backup plates instead of steel plates for reinforcing the plate. It was further specified that the backup metallic reinforcing plate is compatible with the vehicle material to avoid dissimilar properties that might cause corrosion.

# 2.7 Clause 5.5.3 is revoked and substituted with the following:

**5.5.3** *Tanks* and any other *components* of the fuel system shall be installed with as much road clearance as practicable. This clearance shall be measured from the bottom of the tank or the lowest fitting, support or attachment on the tank or fuel system or its housing (if any), whichever is lowest, as follows:

1. **Tanks** and any **component** of the fuel system installed between axles shall be no lower than the lowest point forward of the tank or fuel system on:

- (a) the lowest structural component of the body;
- (b) the lowest structural component of the frame or subframe, if any;
- (c) the lowest point of the engine;
- (d) the lowest point of the transmission (including the clutch housing or torque converter housing, as applicable); and.
- 2. **Tanks** and fuel system **components** installed behind the rear axle and extending below frame shall be no lower than the lowest point of the following points and surfaces when the vehicle is loaded to the gross vehicle weight rating:
  - a. Not lower than the lowest point of the structural component of the body, engine, transmission (including clutch housing or torque converter housing, as applicable), forward of the tank or fuel system. Also no lower than the lines extending rearward from each wheel at the point where the wheels contact the ground directly below the centre of the axle to the lowest and most rearward structural interference (i.e. bumper, bumper frame, etc.); and Note: Some examples of structural components include bumper, bumper frame, frame mounted trailer hitch less attachments, extensions, etc.
  - b. Where there are two or more rear axles, the lines shall be made from the rearmost axle.

### 2.8 Sub-clause 5.7.6 is amended by adding the following:

#### 5.7.6.6

A supply line of a vehicle or a return line from the engine to the *tank* shall be installed to maintain a clearance of at least 2 inches (50 mm) from any positive unfused terminal.

### 2.9 Sub-clause 5.7.7 is amended by adding the following:

#### 5.7.7.8

A supply line that pierces a panel of a vehicle shall be protected from damage by a grommet, bulkhead fitting or a similar device.

### $\Delta$ 2.10 Sub-clause 5.7.8 is amended by adding the following:

#### 5.7.8.8

Gear clamps shall not be used.

#### Background:

Gear clamps were found to be used for propane vehicle conversions that leaked.

#### 2.11 Sub-clause 5.12 is amended by adding the following:

#### 5.12.6

Fuel systems shall be inspected every five years in accordance with B149.5-15 Annex F.

#### 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 5.12.6 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.

#### Background:

To ensure the propane conversion centres are operating in accordance with the regulations and facilitate audits by TSSA for compliance.

3. Δ The CSA Standard B149.1-15 "Natural gas and propane installation code" published in August 2015 by the Canadian Standards Association is adopted for the installation requirements for mobile homes and recreational vehicles.

#### Background:

S. 2(1)(b) of O. Reg. 211/01 applies to the installation of appliances, equipment, components, accessories and containers on highway vehicles, recreational vehicles, mobile housing, outdoor food service units, and wash-mobile when propane is to be used for fuel purposes.

In 2015, CSA moved all these requirements from B149.2 to B149.1

- The TSSA Field Approval Code, TSSA-FA-2015, is adopted for the approval of assembly or Λ 4. construction of an appliance.
- Λ 5. The TSSA Mobile Food Service Equipment Code, TSSA-MFSE-2015, is adopted for the approval of mobile food service equipment.

#### Background:

The new code has been developed for the specific requirements of mobile food service equipment.

# This amendment is effective May 1, 2017.

DATED at Toronto this February 1, 2017

# John Marshall

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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