

DIRECTIVE

PROPANE FACILITY OPERATIONS AND MAINTENANCE PROCEDURES

This Directive is being issued by a provincial safety manager pursuant to section 30 of the Safety Standards Act.

Date of Issue: October 20, 2017

Directive No: D-GA-2017-04

General Details

This directive sets out the policies for the development and documentation of operating procedures for day to day operation, emergency procedures and maintenance procedures of propane facilities in accordance with CSA B149.2 Propane Storage and Handling Code.

Specific Details

As set out in Appendix 2 of Ministerial Order M297 deposited as B.C. Reg. 209/2016 (attached to this directive), CSA B149.2-15 will come into effect as of November 1, 2017.

CSA B149.2 Clause 7.22 requires the establishment of operation and maintenance procedures for propane facilities:

7.22 Operations and maintenance procedures

7.22.1 General

Procedures shall be established appropriate to tank systems, filling plants, container refill centres, and other facilities where liquid propane is piped to a vaporizer or process, as follows:

- (a) operating procedures sufficient to ensure safety and reliability in the day-to-day operation of the facility; and
- (b) maintenance procedures, covering testing, inspection, monitoring, and documenting the equipment, its repair and general up keep.

The requirements for operations and maintenance procedures apply to facilities required to hold an operating permit in accordance with section 28(1)(a)(b)(c) or (h) of the Gas Safety Regulation (GSR):

- Container refill centers – facilities, including buildings, consisting of propane storage containers, piping and dispensing systems where liquid propane is transferred to containers
- Dispensing systems - a system consisting of tank, pump and motor, propane dispenser, and associated piping, for the storage, metering, and dispensing of liquid propane into containers or vehicle fuel containers
- Filling (bulk) plants – facilities for the distribution of liquid propane consisting of propane storage tanks and equipment for the transfer of liquid propane to or from rail cars, tank trucks or dispensing to containers or vehicle fuel containers
- Tank heaters – facilities with a form of vaporizer used to apply heat either directly to a portion of the container surface in contact with propane liquid or indirectly by circulating propane liquid from the container to the device and then back to the container

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- Tank systems – facilities with a container or assembly of containers designed and fabricated in accordance with CSA B51 for the storage of propane in above ground, underground or mounded tanks
- Vaporizer – facilities with a device for converting liquid propane to vapour by means other than atmospheric heat transfer through the surface of the container

Owners or operators of propane facilities set out in this directive required to hold an operating permit in accordance with section 28(1)(a)(b)(c) or (h) of the Gas Safety Regulation, shall develop and implement a management program that includes policies, processes and procedures for the operation and maintenance of the facility which:

- Comply with the *Safety Standards Act*, Safety Standards General Regulation, Gas Safety Regulation and CSA B149.2
- Set relevant company policies and performance objectives,
- Proactively identify hazards, evaluate risks, identify and implement risk mitigations measures, and conduct inspection, maintenance, and monitoring activities,
- Establish clear responsibilities and accountabilities,
- Provide sufficient trained and competent persons and other resources to manage the program and,
- Administer documentation, records reporting, evaluation and continual improvement.

Technical Safety BC manual “**MAN-4058-00**” provides guidance for the development, documentation and implementation of operations and maintenance procedures. The manual will assist owners and operators to establish operations and maintenance procedures that are relevant to the size and complexity of their facility.

Owners of establishments holding an operating permit issued under section 28(1)(a)(b)(c) or (h) of the Gas Safety Regulation are required to have documented operations and maintenance procedures as required by CSA B149.2-15 for renewal of operating permits after November 1, 2017.

The owner of an establishment installed after November 1, 2017, who must apply for an operating permit in accordance with section 28(1)(a)(b)(c) or (h) of the Gas Safety Regulation shall provide documented operations and maintenance procedures as required by CSA B149.2-15 as a term and condition of permit issuance.

A review to verify operations and maintenance procedures may be conducted by a safety officer after November 1, 2017 when operating permits are renewed or during annual operating permit on-site assessments in accordance with section 18 (1) (k) of the *Safety Standards Act*, a safety officer may request the facility’s operation and procedure manual, records or any other documentation for monitoring or auditing as part of the verification process.



Brad Wyatt
Provincial Safety Manager - Gas

References:

Safety Standards Act
Gas Safety Regulation

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Ministerial Order M 297 deposited as B.C. Reg. 209/2016
CSA B149.2-15 - Propane Storage and Handling Code

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**PROVINCE OF BRITISH COLUMBIA
REGULATION OF THE MINISTER OF
NATURAL GAS DEVELOPMENT AND MINISTER RESPONSIBLE FOR HOUSING
AND DEPUTY PREMIER**

Safety Standards Act

Ministerial Order No. M297

I, Rich Coleman, Minister of Natural Gas Development and Minister Responsible for Housing and Deputy Premier, order that the Gas Safety Regulation, B.C. Reg. 103/2004, is amended

- (a) effective November 1, 2016, as set out in the attached Appendix 1, and
- (b) effective November 1, 2017, as set out in the attached Appendix 2.

July 28 2016
Date



Minister of Natural Gas Development and
Minister Responsible for Housing and
Deputy Premier

(This part is for administrative purposes only and is not part of the Order.)

Authority under which Order is made:

Act and section: *Safety Standards Act*, S.B.C. 2003, c. 39, ss. 8 and 88 (2) (s)

Other: M61/2004

July 7, 2016

R/266/2016/3

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APPENDIX 1

- 1** *The definition of “gas system” in section 1 of the Gas Safety Regulation, B.C. Reg. 103/2004, is amended by repealing paragraph (f) and substituting the following:*
 - (f) is used for the production, handling and utilization of
 - (i) digester gas in a wastewater treatment plant,
 - (ii) landfill gas at a landfill site, or
 - (iii) biogas.
- 2** *Section 2 is amended*
 - (a) *by adding the following definition:*

“biogas” means a gas produced in a digester at a location other than at a wastewater treatment plant; , *and*
 - (b) *in paragraph (a) of the definition of “gas” by adding “, biogas” after “landfill gas”.*
- 3** *Section 28 (8) is amended by adding “or liquefied natural gas” after “liquefied petroleum gas”.*
- 4** *Section 30 (1) (a) to (g) is repealed and the following substituted:*
 - (a) CSA-B149.1-15 Natural gas and propane installation code;
 - (b) CSA-B149.2-10 Propane storage and handling code;
 - (c) CSA-B149.3-15 Code for the field approval of fuel-related components on appliances and equipment;
 - (d) CSA-B149.5-15 Installation code for propane fuel systems and containers on motor vehicles;
 - (e) CSA-B109-14 Natural gas for vehicles installation code;
 - (f) CSA-Z662-07 Oil and gas pipeline systems;
 - (g) ANSI/CSA-B149.6-15 Code for digester gas, landfill gas, and biogas generation and utilization;
 - (h) CSA-B108-14 Compressed natural gas fuelling stations installation code;
 - (i) Annex D, “LNG vehicle fuelling stations”, to CAN/CSA-Z276-15 Liquefied natural gas (LNG) – Production, storage, and handling.
- 5** *Sections 1 and 2 of the Schedule are amended by striking out “CSA-B149.1-10” and substituting “CSA-B149.1-15”.*
- 6** *Section 2.1 of the Schedule is amended*
 - (a) *by striking out “Clause 4.24.2 of CSA-B149.1-10” and substituting “Clause 4.25.10 of CSA-B149.1-15”,*
 - (b) *by renumbering Clause 4.25 as Clause 4.26,*
 - (c) *by renumbering Clause 4.25.1 as Clause 4.26.1, and*

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- (d) by striking out “CSA-B214-07” and substituting “CSA-B214-12”.*
- 7 Section 3 of the Schedule is amended**
- (a) by striking out “CSA-B149.1-10” and substituting “CSA-B149.1-15”, and*
- (b) in Clause 6.15.18 by striking out “section 5.15” and substituting “section 6.15”.*
- 8 Sections 4, 5 and 8 to 10 of the Schedule are amended by striking out “CSA-B149.1-10” and substituting “CSA-B149.1-15”.**
- 9 Section 6 of the Schedule is repealed and the following substituted:**
- 6 Clause 7.25.4 of CSA-B149.1-15 is repealed.**
- 10 Section 7 of the Schedule is amended**
- (a) by striking out “Clause 7.24.5 of CSA-B149.1-10” and substituting “Clause 7.25.5 of CSA-B149.1-15”,*
- (b) by renumbering Clause 7.24A as Clause 7.25A,*
- (c) by renumbering Clause 7.24A.1 as Clause 7.25A.1,*
- (d) by renumbering Clause 7.24A.2 as Clause 7.25A.2,*
- (e) by renumbering Clause 7.24A.3 as Clause 7.25A.3, and*
- (f) by renumbering Clause 7.24A.4 as Clause 7.25A.4.*
- 11 Section 11 of the Schedule is repealed.**

APPENDIX 2

- 1 Section 30 (1) (b) and (f) of the Gas Safety Regulation, B.C. Reg. 103/2004, is repealed and the following substituted:**
- (b) CSA-B149.2-15 Propane storage and handling code;*
- (f) CSA-Z662-15 Oil and gas pipeline systems; .*