

PROPANE REGULATOR INSTALLATION

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

Date of Issue: October 1, 2022

Directive No: D-GA 2012-03

Revision: 02

Scope

This directive is provided to clarify the requirements for installation of propane regulators in vapour service in order to ensure the regulators are not subjected to propane liquid.

Details

Clause 4.5 in both CSA B149.1 Natural gas and propane installation code and B149.2 Propane storage and handling code, state: "The use of an appliance, an accessory, a component, equipment, or material shall be prohibited where a hazard is created".

Clause 5.1 of CSA B149.1 requires that propane gas systems shall be installed to prevent liquefaction of propane.

Liquefaction of propane can create a hazard. First-stage and integral two-stage propane vapour regulators that are not installed directly on a propane container can be subjected to liquid propane due to no-flow conditions and/or changes in ambient temperatures if they are installed below the liquid level of the supply container. Vapour service regulators are not designed to regulate propane liquid, and may be damaged by it, or may pass liquid leading to hazardous conditions downstream.

These regulators must be installed above the maximum liquid level of the supply container(s) and have the supply connection oriented to allow for any liquid to drain back to the container. Second-stage regulators installed in areas of the province where the ambient temperature may permit reliquification at the supplied intermediate pressure are to be installed in such a manner preventing the accumulation of liquid at the regulator's inlet.

Vicky Kang
Manager, Energy
Provincial Safety Manager, Gas

References:

Safety Standards Act
Gas Safety Regulation
Safety Standards General Regulation
CSA B149.1 - Natural gas and propane installation code
CSA B149.2 - Propane storage and handling code

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While we have changed our name, we remain committed to our vision of *Safe technical systems. Everywhere.*