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

Date of Issue: December 30, 2016

Directive No: D-GA 2014-01
Revision: 01

General Details

This directive is to clarify British Columbia Safety Authority (BCSA) requirements for liquid natural gas (LNG) dispensing equipment installations and operation in relation to the Gas Safety Regulation (GSR) under the Safety Standards Act (SSA).

Prior to installation of an LNG dispenser and its related equipment, the owner (or representative) of the same must apply for a design registration in order to have the equipment accepted before installation work is to commence.

Specific Details

Design Registration Requirements

Applications for design registration regarding LNG dispensing equipment must contain all drawings, specifications, calculations and instructions necessary to construct, install, operate and maintain equipment, as it may apply to the below-mentioned codes and standards. The application must also contain a statement of compliance to the below-mentioned codes, standards and practice documents that is signed and sealed by a professional engineer. The design documents shall be sealed by a professional engineer who is registered with the Association of Professional Engineers and Geoscientists of BC.

All LNG dispensing equipment/installations must comply with an approved standard. The associated recognized standards with applicable sections are:

a) CSA B149.1 Natural Gas/Propane Installation Code - adopted under regulation.
b) CSA Z662 Oil and gas pipeline systems Code - adopted under regulation.
c) CSA B108 Natural Gas Fuelling Stations Installation Code - considered a best practice document for these applications.
e) CSA Z276 Liquefied natural gas (LNG) - Production, storage, and handling Code. - considered a best practice document for these applications.
f) NFPA 52 Vehicular Gaseous Fuel Systems Code (replaces NFPA 57) - considered a best practice document for these applications.
For sites where:

- there is not a permanent LNG container in place and the dispenser is supplied by a portable tanker trailer; or
- a tanker may be unconnected to a truck and sited

Applicable clearance, setback, protection and other rules concerning stationary gas equipment may apply under the referenced recognised codes/standards or other recognized document depending on how the equipment has been sited (e.g. - permanently attached versus still on wheels ready-to-tow). Therefore, design submissions for BCSA approval should account for compliance based on all expected modes of operation including total LNG storage capacities at any given time on the site. Significant changes to modes of operation or modifications of existing installations such as change in container size/location (permanent or non-permanent) on the site must be re-submitted for approval to BCSA.

Other Agencies

Municipalities, local fire departments, Transport Canada, Environment Canada and other Ministries of both Federal and Provincial Governments may have approval/permit requirements for other aspects of LNG dispensing operations such as the business, overall site and non-dispensing equipment. BCSA approval does not constitute approval by any other regulatory body or agency. The applicant is responsible for identifying and complying with any applicable requirements and agencies that administer those requirements. Validation documentation from the above noted or other applicable agencies shall be submitted to BCSA prior to issuance of the final operating permit.

Permit Requirements

After a design registration has been accepted, an appropriate installation permit and an application for a Class 8 – Special Type operating permit must be in place before construction takes place. In addition, there must also be an installation permit in place before any modifications are made. Replacement of items of equipment during normal maintenance will not be construed as a modification of an installation.

Note:
Consideration of future development – When selecting locations, due consideration must be given to the development plans of the area. If a building permit has been issued for the area around a proposed installation, such future development needs be taken into consideration in the design and application for acceptance of the installation.

Design approval by BCSA is restricted to acceptance for the purposes of approving the dispensing equipment and any other SSA-regulated products only.

The online design registration link: http://safetyauthority.ca/permits-approvals/design-registrations/gas

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References:
Safety Standards Act
Gas Safety Regulation
CSA B149.1 - Natural gas and propane installation Code
CSA Z662 Oil and gas pipeline systems Code
CSA B108 Natural Gas Fuelling Stations Installation Code
CSA Z276 Liquefied natural gas (LNG) - Production, storage, and handling Code
NFPA 52 Vehicular Gaseous Fuel Systems Code

For more information about British Columbia Safety Authority, please visit our website at: www.safetyauthority.ca