	Fuels Safety Program	Ref. No.: FS-274-25	Rev. No.:
	Advisory	Date: Feb 3, 2025	Date:

IN THE MATTER OF:
THE TECHNICAL STANDARDS AND SAFETY ACT, 2000, S.O. 2000, c. 32
and
ONTARIO REGULATION 214/01 (Compressed Gas)

Subject: **Licensing for Transportation of Compressed Hydrogen & Compressed Natural Gas (CNG)**
Sent to: Posted to TSSA's website

Scope

This advisory outlines the licensing regime requirements for the transportation of compressed gas in accordance with the *Technical Standard and Safety Act*, 2000, S.O. 2000, c. 32 and Ontario Regulation 214/01 (Compressed Gas)

Section 27(1) of Ontario Regulation 214/01 (Compressed Gas) stipulates that no person shall transport compressed gas in a bulk container on a transport vehicle unless the bulk container is licensed.

Definitions

Bulk Container – means a container that is designed to be permanently attached to a transport vehicle for the purpose of transporting compressed natural gas.

Pressure Reduction System (PRS) – an assembly intended to regulate the pressure of a container to the pressure that is required at a customer location for gas utilization of their appliances/equipment.

Tube Trailer – A transport trailer which has more than one transportable bulk container in the shape of tubes, structurally attached to, or forming part of, the trailer in accordance with the requirements of CSA B340, CSA B339, equivalency of safety approvals from Transport Canada, or the U.S. Department of Transportation.

Tube Trailer Operator – Individual that is engaged in the loading/unloading of compressed hydrogen or compressed natural gas at a user location, and is experienced or trained, or both, in such work and complies with the qualification requirements set by the owner of the tube trailer.

New Requirements

Section 27 of Ontario Regulation 214/01 requires that an applicant for a license to transport compressed gas provide all the necessary documents and information in a form followed by an inspection of the bulk container on a transport vehicle. **A licence to transport compressed gas in a bulk container on a transport vehicle is valid for only one transport vehicle**.

Previously, the Technical Standards and Safety Authority (TSSA) has permitted the transport of compressed hydrogen and compressed natural gas through a non-permanent variance application that expires every two years. Approved variances are tied to user location and may or may not include a pressure reduction system and more than one tube trailer under same approval.

As of February 3rd, 2025, TSSA has adopted a new licensing regime which regulates the transport of compressed Hydrogen and Natural Gas by issuing a licence for each transport truck carrying a bulk container that is certified as meeting the requirements of Transport Canada or the U.S. Department of Transportation. A licence will be issued only if it has passed an inspection performed by a TSSA inspector.

The person unloading compressed hydrogen and compressed natural gas from the bulk containers to a user location shall be trained by the Licensee (a company or an individual that holds the bulk container licence from TSSA) or his or her designate to unload safely. A record of training for staff engaged in this capacity shall be kept by the Licensee. The company training manual and record of training of staff shall be readily available upon request of a TSSA Fuels Inspector for inspection.

The licence does not approve:

1. **The Pressure Reduction System assembly connected to the transport truck; or**
2. **Portable transfer system installed on a bulk container beyond what is approved by Transport Canada or the U.S. Department of Transportation.**

For detailed information and guideline on inspection and obtaining a licence to transport compressed hydrogen and compressed natural gas see: Hydrogen Tube Trailer Guideline

Design registration and installation of a Pressure Reduction System

Pressure Reduction System must be approved by TSSA before it is put in operation. PRS design registration shall be submitted through the variance application process. The PRS design registration shall demonstrate compliance towards the following adopted code(s):

1. CAN/BNQ – 1784-000 Canadian Hydrogen Installation Code
2. CSA B108 – Compressed Natural Gas Fuelling Stations Installation Code
3. CSA B149.1 – Natural Gas and Propane Installation Code

The installation, operation and maintenance of the PRS shall comply with the following:

a) Pressure reductions systems installations shall be performed by the OEM or the holder of one of the following certificates under Ontario Regulation 215/01: RSI, G.1, H2;
b) Persons carrying out the set-up and commissioning of a pressure reduction system (PRS) shall hold one of the following certificates: RSI, H2, or G.1 under Ontario Regulation 215/01, or TSSA Certified Operating Engineer or Compressor Operator under Ontario Regulation 219/01; and
c) Persons servicing and/or maintaining the pressure reduction system shall hold one of the following certificates: RSI, RST, H2, or G.1 under Ontario Regulation 215/01, or TSSA Certified Operating Engineer or Compressor Operator under Ontario Regulation 219/01.

Schedule A

Notes and Actions for Owners and/or Operators of Bulk Containers during the transition from Approved Variance to Compressed Gas Transport Licensing

- Continue operating under the existing variance until the expiry date.
  - Track the expiry date of the current variance and follow the recommended timeline to ensure that operations remain compliant with regulations.
  - Well in advance of the expiry date, begin preparing the necessary documentation and steps for the upcoming Ontario Licence to Trasport Fuel application process.
  - Plan the transition well before the variance expires to avoid any disruptions.
  - Keep detailed records of all activities conducted under the variance.

- Apply for a licence to transport compressed hydrogen and compressed natural gas 60 days in advance of the expiry of the variance.
  - Collect all necessary information related to the transport vehicles (refer to Hydrogen Tube Trailer Guideline).
  - Log into the TSSA Client Portal and navigate to the section specific to compressed gas transport licensing.
  - Complete the online application for Ontario Licence to Trasport Fuel with accurate and detailed information.
  - Ensure that the transport vehicle is ready for inspection, with all safety protocols in place and operational.

- Licensing is vehicle specific. Multiple licences may be required for the fleet.
  - Determine how many vehicles in the fleet need to be licensed for the transportation of compressed gases.
  - A licence to transport compressed gas in a bulk container on a transport vehicle is valid for only one transport vehicle. For each vehicle requiring a licence, complete and submit individual applications through the TSSA Client Portal (“Ontario Licence to Transport Fuel”).
  - Prepare for separate inspections and approval processes for each vehicle.
  - Verify that each vehicle meets the necessary safety standards for transporting compressed gases before applying for the licence.

- Pressure Reduction System (PRS) approval requires a new variance application for design approval
  - When introducing a Pressure Reduction System (PRS) to an operation already covered by an existing variance, a new variance application will be required. This is necessary if the PRS was not previously included in the original variance.
  - Complete a new variance application to include the PRS, ensuring to provide full details on its design and integration into the transport system.
  - If applying for approval of multiple PRS with similar designs, they may be submitted under a single variance application.
  - Ensure all PRS systems are described in sufficient detail and meet the regulatory requirements for safety and operation.