

# CNG STATION APPROVAL CHECKLIST

## 1. Review process & secure permits

- Meet with the RBQ and the local municipality to inform them of the proposed project and to review the approval and permitting process.
- Acquire municipal building permit for station construction.
- Acquire permit from the RBQ for CNG station design and construction.

**Note: The regulation and approval of: (a) fuels; and (b) pressure vessels may reside in different groups within the RBQ.**

## 2. Submit documents & get approvals

- Contact equipment manufacturers (e.g. CNG dryer, CNG compressor package, CNG dispensing equipment, other pressure retaining equipment) to provide:
  - P&IDs with all pipe sizes and pressure ratings shown as well as detailed Bills of Material indicating all component specifications and provincial CRNs OR third-party certification for the equipment
  - CRNs for CNG storage vessels

**Note: This information may be requested by the RBQ or it may be the responsibility of you, your agent, or the equipment manufacturer to submit without being requested. This information will be reviewed by the RBQ.**

- Submit the following documentation to the RBQ:
  - Site plans indicating setbacks and separations consistent with CSA B108 and any additional provincial regulations
  - Narrative description of the station size, equipment to be installed and operation equipment
  - Installation Piping and Instrumentation Diagrams (P&ID) with all pipe sizes and pressure ratings shown as well as with detailed Bills of Material provided that indicate all component specifications and

provincial CRNs. Check Section 204 of the Reference Table on page 3 for any exemptions that may apply.

- Hazardous locations diagram
- Single line electrical schematics

- Acquire electrical approval on each piece of major equipment from a third-party inspection agency or by "special inspection" by the RBQ.

## 3. Construct station & plan for inspections

- Begin site construction once equipment and station design are approved. The RBQ will have specified certain hold and inspection points, such as pressure testing of underground pipe with the trenches open.
- Once construction is complete, obtain approval from the RBQ to energize the equipment and introduce natural gas to the station. The RBQ will also ask that you provide proof of electrical approval and pressure vessel CRNs at this stage.

**Note: The RBQ will provide a temporary permit to operate during commissioning.**

- Once all equipment has been commissioned and tested, submit a request for a final site inspection to the RBQ. This site inspection may include testing of safety equipment, such as emergency shut down (ESD) systems.

## 4. Get operating permit & plan for re-certification

- Upon successful completion of the final inspection, the local municipality will issue an occupancy permit and the RBQ will issue an operating permit.
- Review and understand the requirements for station re-certification as detailed in local regulations.

# HOW TO GET A CNG REFUELING STATION APPROVED QUÉBEC

## What You Need to Know

Congratulations on making the decision to switch your fleet to compressed natural gas (CNG). Whether you decide to work with an experienced engineering firm or you enter into a contract for a turnkey station, there are steps to be aware of to get a CNG station approved. At the beginning of the planning process, start by contacting your local natural gas utility to confirm natural gas supply and available pressure.



The CNG Station Approval Checklist on the next page outlines the steps involved in getting a station approved in Québec. The Reference Table on the last two pages provides extra detail on process, review, inspection, and other requirements.



The primary code that applies is the CSA B108 – Natural Gas Fueling Stations Installation. This Code applies to public and private CNG stations including fast fill and time fill stations.



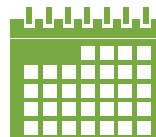
Public stations can refuel to a settled pressure of 3,600 psi.



CNG station installation in Québec is regulated by the Régie du Bâtiment du Québec (RBQ) and by local municipalities. The RBQ oversees fuel safety and pressure vessels. Municipalities check for compliance with local bylaws. No federal approval is required.



Knowledgeable experts and equipment suppliers can help with station options, approvals, and permits.



The total timeline to build a new CNG station will vary, but you should plan for a minimum of six to nine months based on equipment lead time as well as time for review and approval.

## HOW TO USE THIS REFERENCE TABLE

To learn about the requirements for station approval, start in the Description column for the area of interest and read across the row. The information in this Reference Table is intended to provide extra detail related to the process outlined in the Checklist on page 2. Please note that blanks mean there are no current requirements in this area. Note that additional approvals beyond those outlined in the Table may be required depending on the specific circumstances.

## CNG STATION APPROVAL REFERENCE TABLE

Item	Description	Overall Station Design	Pressure Vessels and Piping	Electrical
<b>General Code Requirements</b>				
100	Authority Name	RBQ	RBQ	RBQ
110	Primary Review and Inspection Code(s)	CSA B108 and CSA B149.1	CSA B51 part III (vessels) and ASME B31.3 (piping)	Canadian Electrical Code
111	Secondary Inspection Code or Regulation			
112	Secondary Inspection Code or Regulation			
<b>Canadian Registration Number (CRN) Requirements</b>				
200	Required on Piping Systems:			
201	Required on Vessels: (Note that as per ASME Section VIII--Vessels are >15 psig, and >1.5 FT3 inside volume, and >6" inside diameter.)		ASME sized vessels. Vessels from outside Québec must have a CRN specific for Québec	
202	Required on what components:		All pressure containing devices	
203	Special CRN Requirements:		Must include Québec code in the number	
204	Exemptions:			
<b>Licensing Requirements</b>				
300	Designer Licensing	Member of the «Ordre des Ingénieurs du Québec» (required to work as an engineer in Québec)	Member of the «Ordre des Ingénieurs du Québec» (required to work as an engineer in Québec)	Member of the «Ordre des Ingénieurs du Québec» (required to work as an engineer in Québec)
301	Equipment Supplier Licensing	None	For vessels manufactured in Québec, the supplier must be a registered manufacturer to RBQ	None

Item	Description	Overall Station Design	Pressure Vessels and Piping	Electrical
<b>Licensing Requirements (continued)</b>				
302	Station Developer	Must be a registered society or corporation in Canada		
303	Station Construction Contractor	General contractor license given by the RBQ. Must be registered with «Commission de la Santé et sécurité du Travail (CSST)», which looks after workplace Health and Safety.	Mechanical specialty Contractor license given by the RBQ. Must be registered with «Commission de la Santé et sécurité du Travail (CSST)», which looks after workplace Health and Safety (License 11.1 and TIR GNC).	Electrical specialty contractor license given by the RBQ. Must be registered with «Commission de la Santé et sécurité du Travail (CSST)», which looks after workplace Health and Safety.
304	Station Maintenance Contractor	None		
305	Station Operator	None		
<b>Process Steps</b>				
400	Project Inception	Meeting with RBQ, municipal authority and fire fighter authority to discuss the nature, size and location of the project		
401	Site Design	Submission by Québec registered engineer of a complete set of drawings and specifications		
402	Equipment Design			
403	Equipment in Plant Inspections--In Province	None		
404	Equipment in Plant Inspections--Out of Province	None		
405	Site Testing	Pneumatic testing to 120% or hydro testing to 150% of design pressure *		
406	Site Inspection	None		
407	Final Operating Permit		Registration of vessels by RBQ. Must be visible on the site	

\* Reference to CSA B51 part III code.